

5/17 (8)
No. 84, Original

**In The
Supreme Court of the United States**

OCTOBER TERM, 1995

UNITED STATES OF AMERICA,
Plaintiff,

v.

STATE OF ALASKA

REPORT OF THE SPECIAL MASTER

J. KEITH MANN
Special Master
Stanford, California

March 1996



Contents

	Page
List of illustrations	ix
Table of authorities	xi
 I. INTRODUCTION	 3
A. Nature of the controversy	3
B. Initial proceedings	3
C. Alaska's counterclaim	5
D. The joint statements of questions presented	7
E. The motion for leave to intervene	8
F. Additional proceedings before the Special Master	10

PART ONE ALASKA'S COASTLINE

II. THE LEGAL BACKGROUND	15
 III. THE EFFECT OF ISLANDS ON THE COASTLINE	 19
A. The United States' position	20
B. Alaska's position	25
1. Questions 2 and 12: straight baselines	25
2. Questions 3 and 13: the ten-mile rule	29
3. Question 4: assimilation and simplification ...	30
C. Organization of the discussion	32
D. Statutory provisions	34
1. The Alaska Statehood Act	34
2. The Submerged Lands Act	36
a. The conditional grant	37
b. The definition of "coast line"	39
(1) The Douglas amendment	39
(2) The meaning of "open sea"	41

E. The impermissible contraction theory	44
1. Article 4 straight baselines	45
2. Inland waters at statehood	49
3. General remarks	51
F. Past delimitation practice of the United States	52
1. The <i>Alabama and Mississippi Boundary Case</i>	52
2. United States policy to 1929	56
a. Delaware Bay	57
b. Long Island Sound	58
c. Cuba and the Florida keys	60
d. The Alaska boundary arbitration	61
e. Mississippi Sound	66
f. General statements	67
3. United States policy from 1930 to 1949	71
a. Proposals at the Hague conference of 1930	71
b. Authority of the 1930 proposals	75
c. The 1940 census	80
4. United States policy, 1950–1952	83
a. The Chapman line (1950)	84
(1) Boggs's theory	85
(2) Clement's theory	87
(3) Shalowitz's theory	88
b. The Fisheries case (1951)	93
c. The State Department letter (1951)	98
d. The Master's report in <i>California</i> (1952)	103
e. The Alexander Archipelago (1952)	105
f. Discussion	107
5. United States policy from 1953 to Alaska's statehood	109
a. Application of the Submerged Lands Act in the Gulf States	110
b. Fishing regulations in Alaska	116
c. General statements	122
d. Findings on pre-Convention policy	126
(1) The ten-mile rule	127

(2) The assimilation method	128
(3) Other formulations	130
e. The 1958 Convention	134
f. The application of pre-Convention policy in Alaska	138
6. Poststatehood developments	141
a. The ten-mile rule	142
(1) The <i>Louisiana</i> case, 1960–1961	142
(2) The <i>California</i> case, 1963–1965	152
(3) The <i>Louisiana</i> case, 1965	155
b. Article 4 straight baselines	158
(1) The <i>Louisiana Boundary Case</i> , 1969–1975	158
(2) Alaskan baselines	163
(3) Motivation	168
(4) Future foreign policy	171
7. Fairness	172
G. Conclusion	174
IV. SOUTHERN HARRISON BAY	176
A. The geography	177
B. The issues	181
C. The relation between the two sentences of Article 7(2)	182
1. The Court's interpretation	183
2. The history of Article 7(2)	186
a. Early proposals	186
b. The International Law Commission	188
c. The 1958 Geneva conference	195
d. Other writing	196
D. Application of Article 7(2)	199
1. Initial analysis of the "well-marked indentation" question	200
2. Penetration and mere curvature	205
3. Penetration and landlocked waters	208

a. The meaning of "landlocked waters"	208
b. Adaptation of the Court's test	211
c. Precedents on double-headed bays	216
E. Conclusion	226
V. DINKUM SANDS	227
A. The legal structure	228
B. Background of the dispute	230
C. The high water datum	234
1. Interpretation of "high tide" as mean high water	234
2. Conditions in the Beaufort Sea	236
D. Evidence predating the joint monitoring project	240
1. The cartographic history	240
2. Other observations	244
E. The joint monitoring project	248
1. Determination of mean high water	249
2. Determination of the height of Dinkum Sands	253
3. Alaska's proposed adjustments to the tidal datum	255
a. Extent of the adjustments	255
b. The adjustment for trend	258
c. The adjustment for weather	263
d. The error band	266
F. The composition of Dinkum Sands	269
1. Evidence from 1981	270
2. Ice in international law	271
3. Application to Dinkum Sands	274
G. Observations in 1982 and 1983	276
1. Alaska's measurements	278
2. Late season observations	280
H. Coastal processes	283
I. Requirements for an island	287

1. The notion of permanence	288
2. Horizontal permanence	289
3. Vertical permanence	294
a. History and interpretation of the Convention	294
b. Features of variable height	302
c. The possibility of divided ownership	304
d. Application to Dinkum Sands	307
J. Conclusion	310
VI. THE ARCO PIER EXTENSION	311
A. The Submerged Lands Act and the Convention	313
B. The pier extension as a permanent harbor work	314
1. Articles 3 and 8 of the Convention	314
2. The question of permanence	316
C. The Convention as controlling	323
1. Background	323
2. The argument from emergency	325
3. The argument from the regulations	329
D. Conclusion	337
VII. LOW-TIDE ELEVATIONS	338
PART TWO FEDERAL RESERVATIONS	
VIII. THE NATIONAL PETROLEUM RESERVE-ALASKA	343
A. Question 7: Harrison Bay and Smith Bay	349
B. Question 8: Peard Bay	352
1. The early maps	353
2. The boundary description	357
a. The three-mile requirement	357
b. Peard Bay as a small lagoon	360
3. Conclusion	364

C. Question 11: Wainwright Inlet and the Kuk River, Kugrua Bay and River, and other small inlets, bays and river estuaries	364
1. The geography	365
2. Alaska's maps	366
3. Construction of the boundary description	368
4. Application of the boundary description	372
a. Wainwright Inlet	372
b. Other indentations with sandspits and islands	374
c. Tidally influenced parts of rivers	376
5. Conclusion	380
D. Development of the <i>Pollard</i> doctrine	381
1. Early history	382
2. <i>Montana</i> and <i>Utah</i>	386
E. Issues stemming from <i>Montana</i> and <i>Utah</i>	388
1. Inland waters versus territorial waters	390
2. Reservations or withdrawals versus conveyances	395
3. Authority for the reservation	404
4. Intention to reserve submerged lands	416
a. The precedents	416
b. The language and purpose of the Executive Order	421
c. Conclusion	429
5. Intention to defeat state title	430
6. The scope of the rights retained	440
F. Conclusion	445
IX. THE ARCTIC NATIONAL WILDLIFE REFUGE	447
A. The issues	451
B. Question 9: The effectiveness of the withdrawal application	455
1. Federal power to retain submerged lands	455
2. The statutory framework	457

3. General considerations	459
4. Congressional retention by Statehood Act § 6(e)	462
5. Executive retention under Submerged Lands Act § 5(a)	467
a. An application as an executive retention .	467
b. Authority for an executive retention	473
6. Conclusion	477
C. Question 10: The interpretation of the withdrawal application	477
1. The location of the boundary	478
a. The boundary description on its face	481
b. Other evidence of the intended boundary	482
(1) Prestatehood maps	483
(2) Development of the boundary description	484
(3) The purposes of the Range	485
(4) Comparison with other descriptions .	491
2. Rights to submerged lands inside the boundary	495
3. Conclusion	499

PART THREE SUMMARY

X. SUMMARY OF RECOMMENDATIONS	503
-------------------------------------	-----

APPENDICES	507
A. Text of questions presented	509
B. Report of January 10, 1984	513
C. Order of January 10, 1984 (intervention)	557
D. Order of June 3, 1986 (intervention)	560
E. Stipulation on question 14	564

List of Illustrations

	Page
1.1. The Arctic coast of Alaska	facing 3
3.1. The normal baseline and the three-mile belt in the presence of islands (schematic)	23
3.2. The United States' position in the leased area	facing 24
3.3. Article 4 straight baselines (schematic)	27
3.4. Alaska's position in the leased area using ten-mile straight baselines	facing 28
3.5. The ten-mile rule (schematic)	31
3.6. The method of assimilation and simplification (schematic)	33
4.1. Harrison Bay (from NOS chart 16004)	178
4.2. The parties' positions on closing lines for Harrison Bay	179
4.3. Tenakee Inlet and Freshwater Bay, Alaska (from NOS chart 17300)	220
4.4. Shelikof Bay and Gilmer Bay, Alaska (from NOS chart 17320)	221
4.5. Bodega Harbor and Tomales Bay, California (from NOS chart 18640)	223
4.6. Svaerholthavet, Norway (from <i>Fisheries Case (U.K. v. Nor.)</i>)	224
5.1. Seasonal variation in sea level (adapted from Ak. Ex. 84A-802)	239
5.2. NOS estimates of mean high water and error band compared to 1981 measurements of Dinkum Sands	252

5.3. Alaska's estimates of mean high water and error band compared to 1981 measurements of Dinkum Sands	256
5.4. Mean high water adjusted for weather compared to 1981 measurements of Dinkum Sands	265
5.5. 1982 elevations of Dinkum Sands	276
5.6. 1983 elevations of Dinkum Sands	277
6.1. The ARCO pier and the 1976 extension	312
8.1. The parties' positions on the National Petroleum Reserve-Alaska: panel 1, Icy Cape to Peard Bay	facing 348
8.2. The parties' positions on the National Petroleum Reserve-Alaska: panel 2, Point Barrow to Smith Bay	facing 348
8.3. The parties' positions on the National Petroleum Reserve-Alaska: panel 3, Smith Bay to Harrison Bay	facing 348
8.4. Peard Bay (from NOS chart 16084)	facing 352
9.1. The parties' positions on the Arctic National Wildlife Refuge: panel 4	facing 450
9.2. The parties' positions on the Arctic National Wildlife Refuge: panel 5	facing 450

Table of Authorities

SUMMARY OF CONTENTS

	Page
Cases	xii
Constitutions	xxv
Treaties	xxv
Statutes	xxvi
Federal	xxvi
State	xxxix
Foreign	xxxix
Rules	xxxix
Administrative and executive materials	xxxix
Presidential materials	xxxix
Department of State	xxxix
Department of Justice	xxxix
Department of Commerce	xxxix
Department of the Interior	xxxix
Regulations	xxxix
Public land orders	xxxix
Withdrawal applications and amendments	xxxix
Administrative cases	xxxix
Solicitors' opinions	xxxix
Department of the Navy	xxxix
Department of the Army	xxxix
Other	xxxix
Legislative materials	xxxix
Pickett Act (1910)	xxxix
Submerged Lands Act (1953)	xxxix
Act of September 7, 1957	xxxix
Act of July 3, 1958	xxxix
Alaska Statehood Act (1958)	xxxix
Arctic Wildlife Range	xxxix
Other	xxxix

International materials	xl
League of Nations	xl
United Nations	xl
Pleadings, briefs, arguments	xlili
United States v. California	xlili
United States v. Louisiana	xliv
United States v. Maine	xl v
Fisheries Case	xl v
Other materials	xlvi

Cases

<i>Alaniz v. Tillie Lewis Foods</i> , 572 F.2d 657 (9th Cir.), cert. denied, 439 U.S. 837 (1978)	527
<i>Alaska v. Ahtna, Inc.</i> , 891 F.2d 1401 (9th Cir. 1989), cert. denied, 495 U.S. 919 (1990)	422-23
<i>Alaska v. United States</i> , Civ. No. J75-13 (D. Alaska; renumbered No. A78-069; partial consent judgment entered Dec. 7, 1984; dismissed Nov. 26, 1986)	5
<i>Alaska v. United States</i> , Civ. Nos. A83-343, A84-435, and A86-181 (D. Alaska, consolidated and stayed pending resolution of No. 84, Original)	347
<i>Alaska Boundary Arbitration (U.S. v. Gr. Brit.)</i> , (1903), reprinted in <i>Proceedings of the Alaskan Boundary Tribunal</i> , S. Doc. No. 162, 58th Cong., 2d Sess. (1903-04) and excerpted in Ak. Exs. 85-18, 85-41	29, 53, 54, 61-66, 95, 97, 105-07, 127, 372, 400
<i>Alaska Pacific Fisheries v. United States</i> , 248 U.S. 78 (1918)	399-400, 402-03, 410, 413, 420
<i>In re American Beef Packers, Inc.</i> , 457 F. Supp. 313 (D. Neb. 1978)	538

<i>American Farm Lines v. Black Ball Freight Service</i> , 397 U.S. 532 (1970)	334
<i>Amoco Production Co. v. Village of Gambell</i> , 480 U.S. 531 (1987)	409
<i>The Anna</i> , 165 Eng. Rep. 809 (Adm. 1805)	150, 271-72, 290, 291-92, 304
<i>Arizona v. California</i> , Report of Special Master Simon H. Rifkind (1960), approved in part and disapproved in part, 373 U.S. 546 (1963)	12
<i>Arizona v. California</i> , Memorandum and Report on Preliminary Issues by Special Master Elbert P. Tuttle (1979), leave to file exceptions denied, 444 U.S. 1009 (1980); reviewed together with final report, 460 U.S. 605 (1983)	516, 523, 524, 554
<i>Arizona v. California</i> , 444 U.S. 1009 (1980)	516
<i>Arizona v. California</i> , 460 U.S. 605, 103 S. Ct. 1382 (1983)	516, 522-23, 526, 547-48
<i>Arnold v. Morton</i> , 529 F.2d 1101 (9th Cir. 1976)	430
<i>Atlantis Dev. Corp. v. United States</i> , 379 F.2d 818 (5th Cir. 1967)	530-31, 532, 533, 534-35, 539-40, 541, 544, 547
<i>Beecher v. Wetherby</i> , 95 U.S. 517 (1877)	441
<i>Borax Consolidated v. Los Angeles</i> , 296 U.S. 10 (1935)	234-35
<i>California v. Arizona</i> , 440 U.S. 59 (1979)	5
<i>California ex rel. State Lands Comm'n v. United States</i> , 457 U.S. 273 (1982)	5, 6, 392, 393, 394
<i>Cascade Natural Gas Corp. v. El Paso Natural Gas Co.</i> , 386 U.S. 129 (1967)	548
<i>Clark v. Sandusky</i> , 205 F.2d 915 (7th Cir. 1953)	532

<i>Choctaw Nation v. Oklahoma</i> , 397 U.S. 620 (1970)	387, 395, 402
<i>Cinque Bambini Partnership v. State</i> , 491 So. 2d 508 (Miss. 1986), <i>aff'd sub nom. Phillips Petro-</i> <i>leum Co. v. Mississippi</i> , 484 U.S. 469 (1988)	379
<i>Citizens to Preserve Overton Park, Inc., v. Volpe</i> , 401 U.S. 402 (1971)	332
<i>Confederated Salish & Kootenai Tribes v. Namen</i> , 665 F.2d 951 (9th Cir. 1981), <i>cert. denied</i> , 459 U.S. 977 (1982)	420, 421
<i>Corby Recreation, Inc. v. General Elec. Co.</i> , 581 F.2d 175 (8th Cir. 1978)	531-32, 540, 541-42, 544, 547
<i>Corfu Channel Case</i> , 1949 I.C.J. Rep. 4	154
<i>Coyle v. Smith</i> , 221 U.S. 559 (1911)	384
<i>Dalva v. Bailey</i> , 158 F. Supp. 204 (S.D.N.Y. 1957)	532
<i>Delimitation of the Continental Shelf (U.K. v. Fr.)</i> , 18 R. Int'l Arb. Awards 3 (1977)	301-02
<i>Diaz v. Southern Drilling Corp.</i> , 427 F.2d 1118 (5th Cir.), <i>cert. denied</i> , 400 U.S. 878 (1970)	527, 540, 544, 547
<i>Re Dominion Coal Co.</i> , 40 D.L.R. 2d 593 (Sup. Ct. N.S. 1963)	204-05
<i>Edmondson v. Nebraska ex rel. Meyer</i> , 383 F.2d 123 (8th Cir. 1967)	538
<i>Federal Crop Insurance Corp. v. Merrill</i> , 332 U.S. 380 (1947)	335
<i>Finch v. Weinberger</i> , 407 F. Supp. 34 (N.D. Ga. 1975), <i>aff'd sub nom. Cash v. Mathews</i> , 425 U.S. 967 (1976)	527

<i>Fisheries Case (U.K. v. Nor.)</i> , 1951 I.C.J. 116	53, 83, 93-98, 100, 191, 194, 207, 208-09, 218, 222, 224
<i>Florida v. Georgia</i> , 58 U.S. (17 How.) 478 (1854) ...	553-54
<i>Florida Power Corp. v. Granlund</i> , 78 F.R.D. 441 (M.D. Fla. 1978)	533
<i>Francis v. Chamber of Commerce of the United States</i> , 481 F.2d 192 (4th Cir. 1973)	531, 532
<i>Hans v. Louisiana</i> , 134 U.S. 1 (1890)	520
<i>Hobson v. Hansen</i> , 44 F.R.D. 18 (D.D.C. 1968)	534
<i>Hynes v. Grimes Packing Co.</i> , 337 U.S. 86 (1949)	409-10, 413, 415, 428
<i>Illinois v. City of Milwaukee</i> , 406 U.S. 91 (1972)	549-50
<i>International Tank Terminals Ltd. v. M/V Acadia Forest</i> , 579 F.2d 964 (5th Cir. 1978)	543, 544
<i>Inupiat Community v. United States</i> , 548 F. Supp. 182 (D. Alaska 1982) (Civil No. A81-019), <i>aff'd</i> , 746 F.2d 570 (9th Cir. 1984), <i>cert. denied</i> , 474 U.S. 820 (1985)	9, 528, 558, 560, 561
<i>Justheim v. McKay</i> , 123 F. Supp. 560 (D.D.C. 1954), <i>aff'd</i> , 229 F.2d 29 (D.C. Cir.), <i>cert. denied</i> , 356 U.S. 933 (1956)	427
<i>Kaufman v. Wolfson</i> , 137 F.Supp. 479 (S.D.N.Y. 1956)	532
<i>Kheel v. American S.S. Owners Mut. Protection & Indem. Ass'n</i> , 45 F.R.D. 281 (S.D.N.Y. 1968)	534-35
<i>Knight v. United States Land Ass'n</i> , 142 U.S. 161 (1891)	378, 380
<i>Kozak v. Wells</i> , 278 F.2d 104 (8th Cir. 1960)	532, 536, 539

<i>Legal Aid Soc'y v. Dunlop</i> , 618 F.2d 48 (9th Cir. 1980)	527
<i>Liberty Mut. Ins. Co. v. Pacific Indem. Co.</i> , 76 F.R.D. 656 (W.D. Pa. 1977)	534
<i>Louisiana v. Mississippi</i> , 202 U.S. 1 (1906)	66-67, 92, 112, 115, 116
<i>McDonald v. E. J. Lavino Co.</i> , 430 F.2d 1065 (5th Cir. 1970)	527
<i>MacDonald v. United States</i> , 119 F.2d 821 (9th Cir. 1940), modified sub nom. <i>Great Northern Ry. v. United States</i> , 315 U.S. 262 (1942)	542-43, 544, 548
<i>Mahler v. Norwich & N.Y. Transp. Co.</i> , 35 N.Y. 352 (1866)	58-59, 91, 116, 173
<i>Mammoth Oil Co. v. United States</i> , 275 U.S. 13 (1927)	425
<i>Manchester v. Massachusetts</i> , 139 U.S. 240 (1891) ..	66, 115
<i>Martin v. Travelers Indem. Co.</i> , 450 F.2d 542 (5th Cir. 1971)	531
<i>Martin v. Waddell</i> , 41 U.S. (16 Pet.) 367 (1842)	382, 383, 387, 402
<i>Maryland v. Louisiana</i> , 451 U.S. 725 (1981)	522, 523
<i>Metlakatla Indian Community v. Egan</i> , 369 U.S. 45 (1962)	400
<i>Minnesota ex rel. Alexander v. Block</i> , 660 F.2d 1240 (8th Cir. 1981), cert. denied, 455 U.S. 1007 (1982)	498
<i>Monaco v. Mississippi</i> , 292 U.S. 313 (1934)	520
<i>Montana v. United States</i> , 450 U.S. 544 (1981)	10, 346-48, 366, 382-445 passim, 453, 454, 455, 461, 478, 495, 496, 499

<i>New Hampshire v. Maine</i> , 426 U.S. 363 (1976)	307, 351
<i>New Jersey v. New York</i> , 345 U.S. 369 (1953) (per curiam)	521, 523
<i>New Mexico v. Aamodt</i> , 537 F.2d 1102 (10th Cir. 1976), cert. denied, 429 U.S. 1121 (1977)	541, 544, 547
<i>Ex parte New York (No. 1)</i> , 256 U.S. 490 (1921)	521
<i>Nuesse v. Camp</i> , 385 F.2d 694 (D.C. Cir. 1967)	531, 532, 536, 538
<i>Office of Personnel Management v. Richmond</i> , 496 U.S. 414 (1990)	335
<i>Ohio v. Kentucky</i> , 410 U.S. 641 (1973)	7
<i>Oklahoma v. Texas</i> , 258 U.S. 574 (1922)	522, 523
<i>Oregon ex rel. State Land Board v. Corvallis Sand & Gravel Co.</i> , 429 U.S. 363 (1977)	384, 92-93
<i>Otis Elevator Co. v. Standard Constr. Co.</i> , 10 F.R.D. 404 (D. Minn. 1950)	532
<i>Packer v. Bird</i> , 137 U.S. 661 (1891)	387
<i>Pan American Petroleum & Transp. Co. v. United States</i> , 273 U.S. 456 (1927)	425
<i>Phillips Petroleum Co. v. Mississippi</i> , 484 U.S. 469 (1988)	348, 378-79, 402
<i>Pierson v. United States</i> , 71 F.R.D. 75 (D. Del. 1976)	539, 545
<i>Pollard v. Hagan</i> , 44 U.S. (3 How.) 212 (1845)	15, 19, 50, 51, 113, 174, 346, 348, 381-84, 390, 391, 392, 402, 451, 455
<i>Prentice v. Northern Pac. R.R.</i> , 154 U.S. 163 (1894)	369-70, 482

<i>Service v. Dulles</i> , 354 U.S. 363 (1957)	334
<i>Shively v. Bowlby</i> , 152 U.S. 1 (1894)	15, 348, 384-86, 397, 402, 403, 414, 415, 456, 461
<i>Smith v. Reeves</i> , 178 U.S. 436 (1900)	521
<i>South Dakota v. Nebraska</i> , Report of Special Master Oren Harris (1977), <i>exception overruled</i> , 434 U.S. 948 (1977)	524
<i>South Dakota v. Nebraska</i> , 434 U.S. 948 (1977)	522
<i>Stadin v. Union Elec. Co.</i> , 309 F.2d 912 (8th Cir. 1962), <i>cert. denied</i> , 373 U.S. 915 (1963) ...	539, 544, 546
<i>Sullivan v. United States</i> , 348 U.S. 170 (1954)	334-35
<i>Texas v. Louisiana</i> , 416 U.S. 965 (1974)	523
<i>Texas v. New Mexico</i> , Report of Special Master Charles J. Meyers (1986), <i>exceptions sustained in part and overruled in part</i> , 482 U.S. 124 (1987)	12
<i>Texas v. Oklahoma</i> , Report of Special Master John A. Carver, Jr. (1981), <i>ordered filed</i> , 450 U.S. 905; <i>acted upon</i> , 450 U.S. 1038 (1981)	524
<i>Texas & Pac. Ry. v. Marshall</i> , 136 U.S. 393 (1890)	320
<i>Trbovich v. United Mine Workers</i> , 404 U.S. 528 (1972)	538, 539, 540, 544
<i>United States v. Alaska</i> , 422 U.S. 184 (1975) (Cook Inlet)	6, 45, 52, 119-21, 163
<i>United States v. Alaska</i> (No. 84, Original)	
442 U.S. 937 (1979)	3, 517
444 U.S. 1065 (1980)	4, 6, 517
445 U.S. 914 (1980)	4, 517
452 U.S. 913 (1981)	8, 515, 518, 560
465 U.S. 1018 (1984)	9

<i>United States v. Alaska</i> , 503 U.S. 569 (1992) (Norton Sound)	171, 306, 313, 325, 330
<i>United States v. Alaska</i> , 423 F.2d 764 (9th Cir.), <i>cert. denied</i> , 400 U.S. 967 (1970) (Kenai Moose Range)	401, 420-21
<i>United States v. Aranson</i> , 696 F.2d 654 (9th Cir.), <i>cert. denied</i> , 464 U.S. 982 (1983)	420
<i>United States v. Brown</i> , 552 F.2d 817 (8th Cir.), <i>cert. denied</i> , 431 U.S. 949 (1977)	498
<i>United States v. Caceres</i> , 440 U.S. 741 (1979)	334
<i>United States v. California</i> , 332 U.S. 19 (1947)	15, 16, 56, 76, 336, 391-92, 394
<i>United States v. California</i> , 332 U.S. 804 (1947) (order and decree)	77, 79, 100
<i>United States v. California</i> , 334 U.S. 855 (1948) (ordering appointment of Master)	77
<i>United States v. California</i> , 337 U.S. 952 (1949) (directing Master to proceed)	77
<i>United States v. California</i> , Report of Special Master William H. Davis (under order of June 27, 1949) (1951) (Ak. Ex. 85-90), <i>reprinted in The Reports of the Special Masters of the United States Supreme Court in the Submerged Lands Cases, 1949-1987</i> (Michael W. Reed, G. Thomas Koester, & John Briscoe eds., 1991), at 15	78, 87-88, 98, 101
<i>United States v. California</i> , 341 U.S. 946 (1951) (ordering a briefing on the Master's report)	98
<i>United States v. California</i> , 342 U.S. 891 (1951) (ordering the Master to proceed with hearings)	98

<i>United States v. California</i> , Report of Special Master William H. Davis (under order of Dec. 3, 1951) (1952), reprinted in Reed, Koester, & Briscoe, <i>supra</i> page xix, at 65, and in 1 Aaron L. Shalowitz, <i>Shore and Sea Boundaries</i> (U.S. Dep't of Commerce Pub. 10-1, 1962), at 329 (U.S. Ex. 85-205)	100, 103-05, 152-53, 323-24
<i>United States v. California</i> , 375 U.S. 927 (1963) (authorizing a supplemental complaint and new exceptions to the Master's report)	152
<i>United States v. California</i> , 381 U.S. 139 (1965)	17-18, 21, 34-54 passim, 104-72 passim, 177, 214, 228, 293, 306, 313-14, 323-25, 329, 330, 333, 350, 371
<i>United States v. California</i> , 382 U.S. 448 (1966) (supplemental decree)	234, 330
<i>United States v. California</i> , 432 U.S. 40 (1977) (second supplemental decree)	218, 222, 223, 351
<i>United States v. California</i> , 436 U.S. 32 (1978) (Channel Islands National Monument)	392, 394, 401-402
<i>United States v. California</i> , 447 U.S. 1 (1980) (effect of piers on the coastline)	315-16
<i>United States v. City of Anchorage</i> , 437 F.2d 1081 (9th Cir. 1971) (Alaska Railroad)	401, 420
<i>United States v. Cook</i> , 86 U.S. (19 Wall.) 591 (1873) ...	441
<i>United States v. Florida</i> , 363 U.S. 121 (1960)	142
<i>United States v. Florida</i> , Supplemental Report of Special Master Albert B. Maris (1975) (U.S. Ex. 85-507), reprinted in Reed, Koester, & Briscoe, <i>supra</i> page xix, at 575, decree entered, 425 U.S. 791 (1976)	61

<i>United States v. Florida</i> , 425 U.S. 791 (1976)	61, 351
<i>United States v. Holt State Bank</i> , 270 U.S. 49 (1926)	386-87, 461
<i>United States v. IBM</i> , 62 F.R.D. 530 (S.D.N.Y. 1974)	539, 544, 545
<i>United States v. Louisiana</i> , 339 U.S. 699 (1950)	6, 53, 84, 86, 89, 110, 137, 161
<i>United States v. Louisiana</i> , 340 U.S. 899 (1950) (decree)	110
<i>United States v. Louisiana</i> , 350 U.S. 990 (1956) (granting leave to file complaint)	110
<i>United States v. Louisiana</i> , 351 U.S. 978 (1956) (enjoining new development in the disputed area unless by agreement of the parties filed with the Court)	110
<i>United States v. Louisiana</i> , 354 U.S. 515 (1957) (finding that all the Gulf States should be parties)	112
<i>United States v. Louisiana</i> , 363 U.S. 1 (1960)	6, 114, 132, 142, 151, 400, 493-95
<i>United States v. Louisiana</i> , 364 U.S. 502 (1960) (decree)	142
<i>United States v. Louisiana</i> , 382 U.S. 288 (1965) (supplemental decree)	6, 155-57, 158
<i>United States v. Louisiana</i> , 389 U.S. 155 (1967) (concerning jetties off the Texas coast)	37, 43
<i>United States v. Louisiana (Texas Boundary Case)</i> , 394 U.S. 1 (1969)	293
<i>United States v. Louisiana (Louisiana Boundary Case)</i> , 394 U.S. 11 (1969)	6, 16, 34-170 passim, 183-85, 199, 203-05, 230, 272, 291, 293, 305-06, 314-16, 324, 333, 338, 350

<i>United States v. Louisiana</i> , 404 U.S. 388 (1971) (third supplemental decree)	6
<i>United States v. Louisiana</i> , 409 U.S. 17 (1972) (fourth supplemental decree)	6
<i>United States v. Louisiana</i> , Report of Special Master Walter P. Armstrong, Jr. (1974) (U.S. Ex. 85-415), reprinted in <i>The Reports of the Special Masters of the United States Supreme Court in the Submerged Lands Cases, 1949-1987</i> (Michael W. Reed, G. Thomas Koester, & John Briscoe eds., 1991), at 181, and in 59 I.L.R. 249, exceptions overruled, 420 U.S. 529 (1975)	41, 48, 80-81, 151-52, 161, 162, 184, 292
<i>United States v. Louisiana (Louisiana Boundary Case)</i> , 420 U.S. 529 (1975)	6, 41, 48, 152, 184, 292
<i>United States v. Louisiana</i> , 422 U.S. 13 (1975) (supplemental decree)	6
<i>United States v. Louisiana</i> , 446 U.S. 253 (1980) (interpreting the interim agreement of October 1956)	6, 111
<i>United States v. Louisiana</i> , 452 U.S. 726 (1981) (final decree)	6
<i>United States v. Louisiana</i> , 456 U.S. 865 (1982) (Special Master discharged)	6
<i>United States v. Louisiana (Alabama and Mississippi Boundary Case)</i> , Report of Special Master Walter P. Armstrong, Jr. (1984) (U.S. Ex. 85-503), reprinted in Reed, Koester, & Briscoe, <i>supra</i> , at 349, confirmed in part, 470 U.S. 93 (1985)	30, 53, 54, 55, 80, 83, 92, 94, 97, 103

<i>United States v. Louisiana (Alabama and Mississippi Boundary Case)</i> , 470 U.S. 93 (1985)	16, 29, 34, 44, 45, 52-55, 58, 67, 70, 79, 89, 94, 95, 133, 135, 158
<i>United States v. Maine</i> , Report of Special Master Albert B. Maris (1974), reprinted Reed, Koester, & Briscoe, <i>supra</i> page xxii, at 593, exceptions overruled, 420 U.S. 515 (1975)	273
<i>United States v. Maine</i> , 420 U.S. 515 (1975)	273, 392
<i>United States v. Maine (Massachusetts Boundary Case)</i> , 452 U.S. 429 (1981) (Massachusetts Bay and Buzzards Bay)	351
<i>United States v. Maine (Rhode Island and New York Boundary Case)</i> , Report of Special Master Walter E. Hoffman (Oct. Term, 1983) (U.S. Ex. 85-125), reprinted in Reed, Koester, & Briscoe, <i>supra</i> page xxii, at 809, exceptions overruled, 469 U.S. 504 (1985)	210
<i>United States v. Maine (Massachusetts Boundary Case)</i> , Report of Special Master Walter E. Hoffman (Oct. Term, 1984) (U.S. Ex. 85-903), reprinted in Reed, Koester, & Briscoe, <i>supra</i> page xxii, at 703 (Nantucket Sound and Vineyard Sound), exception overruled, 475 U.S. 89 (1986)	57-58
<i>United States v. Maine (Rhode Island and New York Boundary Case)</i> , 469 U.S. 504 (1985)	60, 89, 184-85, 200, 209-12, 214
<i>United States v. Maine</i> , 475 U.S. 89 (1986) (Nantucket Sound)	45, 58, 135, 173-74
<i>United States v. Mendoza</i> , 464 U.S. 154 (1984)	30

<i>United States v. Midwest Oil Co.</i> , 236 U.S. 459, 59 L.Ed. 673 (1915)	406, 411, 412, 413, 473
<i>United States v. Nixon</i> , 418 U.S. 683 (1974)	334
<i>United States v. Oregon</i> , 295 U.S. 1 (1935)	386-87, 403, 404
<i>United States v. Texas</i> , 339 U.S. 707 (1950)	84
<i>United States ex rel. Accardi v. Shaughnessy</i> , 347 U.S. 260 (1954)	334
<i>Utah v. United States</i> , 394 U.S. 89 (1969)	519, 521-22, 551-52
<i>Utah v. United States</i> , 780 F.2d 1515 (10th Cir. 1985), rev'd sub nom. <i>Utah Div. of State Lands v. United States</i> , 482 U.S. 193 (1987)	401, 444
<i>Utah Div. of State Lands v. United States</i> , 482 U.S. 193 (1987)	11, 347-48, 366, 382-445 passim, 454-56, 461, 495-99
<i>Utah Power & Light Co. v. United States</i> , 243 U.S. 389 (1916)	335
<i>Vermont v. New York</i> , 417 U.S. 270 (1974)	307, 351
<i>Virginia v. Westinghouse</i> , 542 F.2d 214 (4th Cir. 1976)	543
<i>Vitarelli v. Seaton</i> , 359 U.S. 535 (1959)	334
<i>Walden v. Elrod</i> , 72 F.R.D. 5 (W.D. Okla. 1976) ...	539, 545
<i>Walpert v. Bart</i> , 44 F.R.D. 359 (D. Md. 1968)	527
<i>Wisconsin v. Baker</i> , 698 F.2d 1323 (7th Cir.), cert. denied, 463 U.S. 1207 (1983)	404, 420

Constitutions

U.S. Constitution	
Art. I, § 8, cl. 17	432
Art. III, § 2, cl. 2	5, 517
Art. IV, § 3, cl. 1 (new states)	384
Art. IV, § 3, cl. 2 (property clause)	397, 398, 406, 456, 498
Amend. XI	520-24
Alaska Constitution	
Art. XII, § 1	34
Art. XII, § 12	400, 443

Treaties

Second Treaty of Fort Laramie, 15 Stat. 649 (1868)	386, 422
North Sea Fisheries Convention, May 6, 1882, 160 Consol. T.S. 219	63, 290, 296
Convention on the Territorial Sea and the Contiguous Zone, done Apr. 29, 1958, 15 U.S.T. 1606, 516 U.N.T.S. 205	17-326 passim, 503
Article 3	21, 44, 229, 304, 314-16, 323, 333, 337
Article 4	25-27, 29, 32, 43, 45-49, 134, 142, 153, 158-72, 503
Article 4(3)	304
Article 4(6)	161
Article 5	21
Article 6	22
Article 7	44, 60, 153, 176, 371
Article 7(1)	195
Article 7(2)	181-226 passim
Article 7(3)	181
Article 7(4)	181

Article 7(6)	44, 51, 58
Article 8	44, 314-16, 323, 337
Article 10	21, 228-29, 234, 269-310 passim
Article 11	230, 304, 338
Article 12	130
Article 13	44, 371
Vienna Convention on the Law of Treaties, <i>done</i> May 22, 1969, 1155 U.N.T.S. 331	186
United Nations Convention on the Law of the Sea, <i>done</i> Dec. 10, 1982, in <i>The Law of the Sea</i> , U.N. Sales No. E.83.V.5 (1983)	17, 198

Statutes

FEDERAL

Act of Apr. 8, 1812, ch. 50, 2 Stat. 701 (admitting Louisiana to the Union)	494
Act of Mar. 3, 1891, ch. 561, 26 Stat. 1095	
§ 14	424
§ 15 (codified at 25 U.S.C. § 495 (1988))	399
Act of Feb. 11, 1897, ch. 216, 29 Stat. 526	412
Act of May 14, 1898. <i>See</i> Alaska Right of Way Act	
Act of June 6, 1900, ch. 786, § 26, 31 Stat. 321, 329-30 (current version at 30 U.S.C. § 49a (1988)) ..	408
Act of June 14, 1906, ch. 3299, 34 Stat. 263 (formerly codified as amended at 48 U.S.C. §§ 243-247)	119
Act of June 26, 1906, ch. 3547, 34 Stat. 478 (Alaska commercial fisheries law) (formerly codified as amended at 48 U.S.C. §§ 230-239, 241-242)	462, 465

Act of June 25, 1910. <i>See</i> Pickett Act	
Act of Aug. 24, 1912, ch. 369, 37 Stat. 497 (amending the Pickett Act, <i>infra</i>)	475
Act of Aug. 24, 1912, ch. 387, 37 Stat. 512	415
Act of June 6, 1924, 43 Stat. 464 (Alaska com- mercial fisheries law) (formerly codified as amended at 48 U.S.C. §§ 221-228) (<i>see also</i> White Act)	462, 465
Act of May 1, 1936, ch. 254, § 2, 49 Stat. 1250 (amending the Wheeler-Howard Act, ch. 576, 48 Stat. 984 (1934)) (repealed 1976)	409-10
Act of May 31, 1938, ch. 297, 52 Stat. 588	408
Act of July 1, 1943, ch. 183, 57 Stat. 301 (Alaska game law) (formerly codified as amended at 48 U.S.C. §§ 192-211)	462, 465
Act of Aug. 8, 1946, ch. 916, § 1, 60 Stat. 950 (amending the Mineral Leasing Act of 1920, <i>infra</i>) (current version at 30 U.S.C. § 181 (1988))	435
Act of July 31, 1947, ch. 406, 61 Stat. 681 (disposal of materials on public lands) (codified as amended at 30 U.S.C. §§ 601-604 (1988))	450
Act of Aug. 8, 1947, ch. 514, 61 Stat. 916	408
Act of Sept. 7, 1957, Pub. L. No. 85-303, 71 Stat. 623	436-38
Act of Feb. 28, 1958, Pub. L. No. 85-337, § 1(2), 72 Stat. 27 (codified at 43 U.S.C. § 155(2) (1988))	439-40
Act of July 3, 1958, Pub. L. No. 85-505, 72 Stat. 322	434-36

Alaska National Interest Lands Conservation Act, Pub. L. No. 96-487, 94 Stat. 2371 (1980) (codi- fied primarily at 16 U.S.C. §§ 3001-3233 (1988))	409, 451
Alaska Native Claims Settlement Act, 43 U.S.C. §§ 1601-1629e (1988 & Supp. V 1993) (enacted 1971)	423, 528, 529, 531, 535, 537, 550, 551, 552
Alaska Right of Way Act, ch. 299, 30 Stat. 409 (May 14, 1898) (current version primarily at 43 U.S.C. §§ 942-1 to 942-9 (1988))	406, 410-11, 414-16, 437, 438, 476-77
Alaska Statehood Act, Pub. L. No. 85-508, 72 Stat. 339 (1958), <i>reprinted as amended in</i> 48 U.S.C. note preceding § 21 (1988)	18, 21, 32-34, 34-35, 37, 50, 109, 117, 430-31, 436, 438, 439, 440, 442, 448, 453, 462
§ 1	34
§ 2	34
§ 4	400, 423, 431, 443
§ 5	229, 431, 443, 457
§ 6	431, 443
§ 6(b)	229, 462
§ 6(e)	457, 458, 462-67, 471, 477
§ 6(g)	462
§ 6(i)	443-44
§ 6(m)	18, 35, 431, 442, 443, 457, 458, 467
§ 11(b)	404, 432-34, 439, 442
Federal Land Policy and Management Act of 1976, Pub. L. No. 94-579, 90 Stat. 2743	
§ 204 (codified at 43 U.S.C. § 1714 (1988))	407
§ 704(a)	407, 473
§ 706(a)	411, 477

Federal Water Pollution Control Act, Pub. L. No. 92-500, sec. 2, § 404(a), 86 Stat. 816, 884 (1972) (codified as amended at 33 U.S.C. § 1344(a) (1988))	317
Mineral Leasing Act of 1920, ch. 85, 41 Stat. 437 (current version at 30 U.S.C. §§ 181-287 (1988 & Supp. V 1993))	412-13, 426, 427, 434, 435, 436
Naval Petroleum Reserves Production Act of 1976, Pub. L. No. 94-258, § 102, 90 Stat. 303 (codified as amended at 42 U.S.C. § 6502 (1988))	345, 430, 433
An Ordinance for the Government of the Territory of the United States north-west of the river Ohio, art. V (1787), <i>reprinted in</i> 1 Stat. 51, 53 and in U.S.C., vol. 1, at li, liii (1994)	383
Oregon Donation Act, ch. 76, 9 Stat. 496 (1850)	384
Outer Continental Shelf Lands Act, ch. 345, 67 Stat. 462 (1953) (codified as amended at 43 U.S.C. §§ 1331-1356 (1988 & Supp. V 1993))	8, 16, 42, 230, 351
Pickett Act, ch. 421, 36 Stat. 847 (June 25, 1910) § 1 (repealed 1976)	406-16, 425, 472, 473, 474-75
§ 2 (repealed in part 1976; current version at 43 U.S.C. § 142 (1988))	473, 475, 476
Pub. L. No. 99-272, § 8005, 100 Stat. 82, 151 (1986) (codified at 43 U.S.C. § 1301(b) (1988)) (amending the Submerged Lands Act, <i>infra</i>)	306
Rev. Stat. §§ 2329-2333 (1878) (current version at 30 U.S.C. §§ 35-38 (1988))	412
Rivers and Harbors Appropriation Act of 1899, ch. 425, § 10, 30 Stat. 1121, 1151 (1899) (as codified at 33 U.S.C. § 403 (1988))	317

S.J. Res. 54, 68th Cong., 1st Sess., 43 Stat. 5 (Feb. 8, 1924)	425
Submerged Lands Act, ch. 65, 67 Stat. 29 (1953) (codified as amended at 43 U.S.C. §§ 1301-1315 (1988))	3, 16, 19, 35, 36-44, 50, 109-16, 152-53, 169, 172, 176, 228, 293, 306, 311, 323, 325, 338, 349, 350, 371, 391-94, 401, 451, 456, 486 & passim
§ 2, 43 U.S.C. § 1301	493
§ 2(a)(2), 43 U.S.C. § 1301(a)(2)	16, 36, 38, 176, 313, 381
§ 2(b), 43 U.S.C. § 1301(b)	16, 37, 38, 306, 494
§ 2(c), 43 U.S.C. § 1301(c)	16, 39, 41, 176, 313, 330
§ 2(e), 43 U.S.C. § 1301(e)	442, 498
§ 3, 43 U.S.C. § 1311	16, 442-43
§ 3(a), 43 U.S.C. § 1311(a)	36, 176, 313, 392, 432, 458, 498
§ 5(a), 43 U.S.C. § 1313(a)	343, 393, 394, 401, 402, 432, 443, 444-45, 458, 467, 468, 470, 477
§ 9, 43 U.S.C. § 1302	16
Sundry Appropriations Act of 1888, ch. 1069, 25 Stat. 505, 527	405, 408, 410, 413, 414, 444
Sundry Appropriations Act of 1890, ch. 837, 26 Stat. 371, 391	405, 406
Trans-Alaska Pipeline Authorization Act, Pub. L. No. 93-153, title II, 87 Stat. 569, 584 (1973) (codified at 43 U.S.C. §§ 1651-1655 (1988))	318, 326-27, 331, 332
28 U.S.C. § 1251(b)(2) (1988)	5
28 U.S.C. § 2409(a) (1988)	5
46 U.S.C. app. § 251 (1988)	119

White Act, ch. 272, § 1, 43 Stat. 464 (June 6, 1924), as amended by Act of June 18, 1926, ch. 621, 44 Stat. 752 (formerly codified at 48 U.S.C. § 221)	117-18, 119, 120, 121
--	-----------------------

STATE

Alaska Stat. Ann. § 38.05.137 (1989)	8
Alaska House Joint Memorial 23, 1959 Session Laws 434 (Mar. 17, 1959)	460

FOREIGN

Cuban Law Decree No. 1948 of Jan. 25, 1955	125
--	-----

Rules

Federal Rules of Civil Procedure

Rule 12(b)(6)	533
Rule 24	524-25, 549
Rule 24(a)	519, 527-48
Rule 24(a) advisory committee's note, 39 F.R.D. 69, 111 (1966)	519
Rule 24(b)	525-27, 528
Rule 41	562
Rule 53(e)(5)	11

Supreme Court Rules

Rule 9.2, 388 U.S. 937 (1966)	524, 529
Rule 17.2, 493 U.S. 1116 (1989)	11

Administrative and Executive Materials

PRESIDENTIAL MATERIALS

- Exec. Order No. 908 (July 2, 1908), *microformed on Presidential Executive Orders, Nos. 1-7403, reel 2* (Library of Congress Photoduplication Serv.) . 424
- Exec. Order No. 1733 (March 3, 1913), *microformed on Presidential Executive Orders, supra, reel 3* 492
- Exec. Order No. 3797-A (Feb. 27, 1923), *microformed on Presidential Executive Orders, supra, reel 6, reprinted in Joint Statement 18a-20a* 343-45, 349, 350, 352-57, 359-64, 366-68, 371-72, 379-80, 405, 406, 416, 421-30, 440, 441, 474
- Exec. Order No. 10,355 (1952), 3 C.F.R. 873 (1949-1953), *reprinted as amended in 43 U.S.C. § 141 note* (1988 & Supp. V. 1993) ... 448, 450, 472, 473
- Proclamation No. 39, 27 Stat. 1052 (1892) 424
- Proclamation of July 23, 1907, 35 Stat. 2149 424
- Proclamation of Feb. 23, 1909, 35 Stat. 2231 423-24
- Proclamation No. 3269 (1959), 3 C.F.R. 4 (1959-1963), *reprinted in 48 U.S.C. note preceding § 21, at 15* (1988) 18, 448-49
- Proclamation No. 5928, 3 C.F.R. 547 (1988), *reprinted in 43 U.S.C. § 1331 note* (1988) 18, 216, 230
- Reorg. Plan No. 2 of 1939, § 4(e), 3 C.F.R. 254, 256 (Supp. 1939), *reprinted in 5 U.S.C. app. at 1435, 1436* (1994) 118
- Reorg. Plan No. 3 of 1946, § 403, 3 C.F.R. 193, 196 (Supp. 1946), *reprinted in 5 U.S.C. app. at 1451, 1452* (1994) 356

DEPARTMENT OF STATE

- Historical Studies Division, U.S. Dep't of State, Research Project No. 637A, Status of Dixon Entrance, 1867-1963 (1963) (Ak. Ex. 85-127, U.S. Ex. 85-230) 118, 122
- Historical Studies Division, U.S. Dep't of State, Research Project No. 637, Status of Hecate Strait, 1876-1963 (1963) (Ak. Ex. 85-128) 118, 122
- Historical Studies Division, U.S. Dep't of State, Research Project No. 637B, Status of Queen Charlotte Sound, 1897-1963 (1963) (Ak. Ex. 85-129) 118, 122
- Historical Studies Division, U.S. Dep't of State, Research Project No. 1031-B, United States Policy Regarding the Oceans and the Law of the Sea, 1960-1967 (1974), excerpt from page 31 (Ak. Ex. 85-182) 169

DEPARTMENT OF JUSTICE

- Seizure in Neutral Waters, 1 Op. Att'y Gen. 32 (1793) ... 57
- Withdrawal of Public Lands, 40 Op. Att'y Gen. 73 (1941) 406
- 40 Op. Att'y Gen. 540 (1947) 427
- Title to Naturally-Made Lands Under the Submerged Lands Act, 42 Op. Att'y Gen. 241 (1963) 292

DEPARTMENT OF COMMERCE

- 45 Fed. Reg. 70,296 (1980) (Ak. Ex. 84A-8) 258, 259
- National Ocean Survey, U.S. Dep't of Commerce, 9 *United States Coast Pilot* (9th ed. 1979) (Ak. Ex. 136) 87, 139-40, 362, 366, 373, 374

- Chart No. 1, Nautical Chart Symbols and Abbreviations* (Dep't of Defense and Dep't of Commerce, 7th ed. 1979) (Joint Ex. a) 381

DEPARTMENT OF THE INTERIOR

Regulations

- 43 C.F.R. §§ 295.9-295.11 (Supp. 1953) (promulgated, 17 Fed. Reg. 7368, 7677 (1952)) 465-66
- 43 C.F.R. §§ 295.9-295.15 (as promulgated, 22 Fed. Reg. 6613 (Aug. 17, 1957)) 447
- § 295.9 471
- § 295.11(a) (1954, Supp. 1962)
 (Ak. Ex. 77) 452-53, 459
- §§ 295.12-295.13 471
- 50 C.F.R. § 203.1 (1940) 121
- 50 C.F.R. § 103.1 (1949) 121
- 21 Fed. Reg. 5446 (1956) 116-17, 122
- 23 Fed. Reg. 2503 (1958) 116, 122
- 24 Fed. Reg. 2053 (1959) 116
- 25 Fed. Reg. 7681 (1960) (notice of proposed revision of fish and wildlife regulations) 116
- 25 Fed. Reg. 8397 (1960) (revision and reorganization of 50 C.F.R.) 116

Public land orders

- Public Land Order 82, 8 Fed. Reg. 1599 (1943) (withdrawing public lands for use in connection with the prosecution of the war), *revoked by* Public Land Order 2215, 25 Fed. Reg. 12,599 (1960) 452, 471, 483

ADMINISTRATIVE AND EXECUTIVE MATERIALS

- Public Land Order 128, 8 Fed. Reg. 8557 (1943) 409-10
- Public Land Order 289, 10 Fed. Reg. 9479 (1945) 345
- Public Land Order 1749, 23 Fed. Reg. 8623 (1958) (Ak. Ex. 73) 491
- Public Land Order 2213, 25 Fed. Reg. 12,597 (1960) 493
- Public Land Order 2214, 25 Fed. Reg. 12,598 (1960) 449-50, 476, 477, 479, 493
- Public Land Order 2215, 25 Fed. Reg. 12,599 (1960) 452
- Public Land Order 2216, 25 Fed. Reg. 12,599 (1960) 493
- Withdrawal applications and amendments*
- 23 Fed. Reg. 364 (1958) 448, 449, 479
- 23 Fed. Reg. 7592 (1958) 474
- 23 Fed. Reg. 8163 (1958) (Ak. Ex. 74) 469, 492
- 23 Fed. Reg. 9039 (1958) 492
- 24 Fed. Reg. 7143 (1959) 474
- 25 Fed. Reg. 10,323 (1960) 474

Administrative cases

- State of Alaska*, 102 IBLA 357 (Interior Bd. of Land Appeals 85-768, June 10, 1988) 423

Solicitors' opinions

- Solicitor's Opinion, 60 Interior Dec. 26 (1947) (Ak. Ex. 79), *upheld in Justheim v. McKay*, 123 F. Supp. 560 (D.D.C. 1954), *aff'd*, 229 F.2d 29 (D.C. Cir. 1956), *cert. denied*, 356 U.S. 933 (1956) . 427

Memorandum from Acting Solicitor J. Reuel Armstrong to the Secretary of the Interior (Opinion M-36239, Oct. 1, 1954) (Ak. Ex. 85-37, Ak. Ex. 85-335, U.S. Ex. 85-403)	115
Memorandum from Deputy Solicitor Edmund T. Fritz to the Under Secretary of the Interior (Opinion M-36562, Aug. 21, 1959) (Ak. Ex. 76)	469, 470, 492
Solicitor's Opinion, 86 Interior Dec. 151 (1978) (Ak. Ex. 80), <i>supplemented and modified</i> , 100 Interior Dec. 103 (1992)	414, 427, 445, 452, 462, 469, 470-71, 484
DEPARTMENT OF THE NAVY	
Navy Department, <i>History of Naval Petroleum Reserves</i> , S. Doc. No. 187, 78th Cong., 2d Sess. (1944)	412, 427-28
Notice of Boundary Description of Naval Petroleum Reserve No. 4, 37 Fed. Reg. 10,088 (May 19, 1972) (Ak. Ex. 90)	349-50, 365, 381
DEPARTMENT OF THE ARMY	
33 C.F.R. § 209.120(g)(10) (1976), 40 Fed. Reg. 31,322 (July 25, 1975)	329-30
33 C.F.R. § 209.120(i)(2)(viii) (1976), 40 Fed. Reg. 31,322 (July 25, 1975)	328, 331
33 C.F.R. § 209.120, App. C (1976)	317, 318
33 C.F.R. § 320.4(f) (1994)	330
OTHER	
U.S. Public Land Law Review Comm'n, <i>One Third of the Nation's Land</i> (1970)	395, 432

Report to the President by Emergency Board No. 151 (appointed by Exec. Order 11,042, 3 C.F.R. 626 (1959-63)) (Southern Pac. Co. & Brotherhood of Ry. Clerks, Nat'l Mediation Bd. Case No. A-6617) (1962)	309
--	-----

Legislative Materials

PICKETT ACT (1910)	
45 Cong. Rec. 621 (1910)	412
<i>Oil-land Withdrawals and the Protection of Locators of Oil Lands: Hearings on H.R. 24070 Before the House Comm. on the Public Lands, 61st Cong., 2d Sess. (1910)</i>	412, 413-14
SUBMERGED LANDS ACT (1953)	
<i>Submerged Lands: Hearings on S.J. Res. 13 and Related Bills Before the Senate Comm. on Interior and Insular Affairs, 83d Cong., 1st Sess. (1953)</i>	100
S. Rep. No. 133, 83d Cong., 1st Sess. (1953)	40, 468
99 Cong. Rec. 2619, 4236 (1953)	468, 469
99 Cong. Rec. 4240-43 (1953)	40, 41
99 Cong. Rec., pt. 13, at 583, 601-02 (1953)	486
ACT OF SEPTEMBER 7, 1957	
H.R. Rep. No. 950, 85th Cong., 1st Sess. (1957)	437
S. Rep. No. 1045, 85th Cong., 1st Sess. (1957), <i>reprinted in 1957 U.S. Code Cong. & Admin. News 1933</i>	437, 438

ACT OF JULY 3, 1958

- S. Rep. No. 1720, 85th Cong., 2d Sess. (1958),
reprinted in 1958 U.S. Code Cong. & Admin.
News 2893 434, 435, 438
- 104 Cong. Rec. 11,900, 12,256-57 (1958) 435-36
- Alaskan Submerged Lands: Hearings on H.R. 8054
Before the Senate Comm. on Interior and Insular
Affairs, 85th Cong., 2d Sess. (1958)* 435, 436
- H.R. 8054, 85th Cong., 1st Sess. § 1, 103 Cong.
Rec. 13,612-13 (1957) 435

ALASKA STATEHOOD ACT (1958)

- S. Rep. No. 1929, 81st Cong., 2d Sess. (1950) 464, 466
- Alaska Statehood: Hearings on S. 50 Before the
Senate Comm. on Interior and Insular Affairs,
83rd Cong., 2d Sess. (1954)* 35, 36, 38, 438, 439
- Alaska-Hawaii Statehood, Elective Governor, and
Commonwealth Status: Hearings on S. 49, S.
399, and S. 402 Before the Senate Comm. on In-
terior and Insular Affairs, 84th Cong., 1st Sess.
(1955)* 439
- Hawaii-Alaska Statehood: Hearings on H.R. 2535,
H.R. 2536, and Related Bills Before the House
Comm. on Interior and Insular Affairs, 84th
Cong., 1st Sess. (1955)* 35, 38, 439
- Alaska Statehood: Hearings on S. 49 and S. 35 Be-
fore the Senate Comm. on Interior and Insular
Affairs, 85th Cong., 1st Sess. (1957)* 439
- Statehood for Alaska: Hearings on H.R. 50 and
Other Bills Before the Subcomm. on Territorial
and Insular Affairs of the House Comm. on*

- Interior and Insular Affairs, 85th Cong., 1st
Sess. (1957)* 439, 466-67
- H.R. Rep. No. 624, 85th Cong., 1st Sess. (1957),
reprinted in 1958 U.S. Code Cong. & Admin.
News 2933 439, 465
- 104 Cong. Rec. 9410-11 (1958) 467
- ARCTIC WILDLIFE RANGE**
- S. 1899, 86th Cong., 1st Sess. (1959), reprinted in
Arctic Wildlife Range—Alaska, infra, at 1 476
- Miscellaneous Fish and Wildlife Legislation: Hear-
ings Before the Subcomm. on Fisheries and
Wildlife Conservation of the House Comm. on
Merchant Marine and Fisheries, 86th Cong., 1st
Sess. (1959)* 460
- H.R. Rep. No. 771, 86th Cong., 1st Sess. (1959)
(U.S. Ex. 28) 460
- 106 Cong. Rec. 2516 (1960) 460-61
- H.R. 7045, 86th Cong., 2d Sess. (1960) (as passed
House, U.S. Ex. 33) 461
- Arctic Wildlife Range—Alaska: Hearings on S.
1899 Before the Merchant Marine and Fisheries
Subcomm. of the Senate Comm. on Interstate and
Foreign Commerce, 86th Cong., 1st & 2d Sess.,
pts. I & II (1959-60)* 461, 476

OTHER

- Provisional U.S. Charts Delimiting Alaskan Terri-
torial Boundaries, Hearing Before the Senate
Comm. on Commerce, 92d Cong., 2d Sess.
(1972) (Ak. Ex. 85-23)* 118, 165

- H.R. Conf. Rep. No. 942, 94th Cong., 2d Sess.,
reprinted in 1976 U.S. Code Cong. & Admin.
News 516 430
- S. Treaty Doc. No. 39, 103d Cong., 2d Sess. (1994) 17

International Materials

LEAGUE OF NATIONS

- League of Nations Conference for the Codification of International Law [1930]* (ed. Shabtai
Rosenne 1975) (4 vols.) 68, 186
- Conference for the Codification of International Law, 2 Bases of Discussion: Territorial Waters*,
League of Nations Doc. C.74.M.39.1929.V
(1929), reprinted in 2 Rosenne, *supra*, and
excerpted in Ak. Ex. 85-4 ("Bases of
Discussion") 68-70, 71, 294-95
- 3 *Acts of the Conference for the Codification of International Law, Minutes of the Second Committee: Territorial Waters*, League of Nations Doc.
C.351(b).M.145(b).1930.V (1930), reprinted in
4 Rosenne, *supra*, and excerpted in Ak. Ex. 85-1
("Acts of Conference") 68, 71, 72,
74, 75, 76, 101, 102, 187-88, 293, 294, 296

UNITED NATIONS

- G.A. Res. 174 (II), 2 U.N. GAOR (123rd plen.
mtg., Nov. 21, 1947) at 105, U.N. Doc. A/519
(1948) 122
- Yearbooks of the International Law Commission,
1951-1956, U.N. Docs. A/CN.4/SER.A/1951 &
1951/Add.1 through A/CN.4/SER.A/1956 &
1956/Add.1 186, 297

- Report of the International Law Commission to the General Assembly*, 6 U.N. GAOR Supp. (No. 9),
U.N. Doc. A/1858 (1951), reprinted in [1951] 2
Y.B. Int'l L. Comm'n 123 122-23, 188
- J.P.A. François, *Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/53 (1952) (in
French), [1952] 2 Y.B. Int'l L. Comm'n 25 189, 297
- J.P.A. François, *Second Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/61 (1953)
(in French), [1953] 2 Y.B. Int'l L. Comm'n 57 . 189, 297
- Report of the Committee of Experts on Technical Questions Concerning the Territorial Sea*,
Annex to François, *Addendum to the Second Report on the Régime of the Territorial Sea*
[below] 189, 193, 200
- J.P.A. François, *Addendum to the Second Report on the Régime of the Territorial Sea*, U.N. Doc.
A/CN.4/61/Add.1 (1953) (in French), [1953] 2
Y.B. Int'l L. Comm'n 75; also U.S. Ex. 85-228
(in English) 189
- J.P.A. François, *Third Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/77 (1954) (in
French), [1954] 2 Y.B. Int'l L. Comm'n 1 190, 297
- Summary Records of the 260th Meeting*, [1954] 1
Y.B. Int'l L. Comm'n 90 297
- Report of the International Law Commission to the General Assembly*, 9 U.N. GAOR Supp. (No. 9),
U.N. Doc. A/2693 (1954), reprinted in [1954] 2
Y.B. Int'l L. Comm'n 140 297
- J.P.A. François, *Amendments Proposed on the Basis of the Observations of Governments on the Draft of Provisional Articles Adopted by the Commis-*

<i>sion at Its Sixth Session</i> , U.N. Doc. A/CN.4/93 (1955) (in French), [1955] 2 Y.B. Int'l L. Comm'n 5	190
<i>Summary Records of the 317th Meeting</i> , [1955] 1 Y.B. Int'l L. Comm'n 201	191, 193
<i>Summary Records of the 318th Meeting</i> , [1955] 1 Y.B. Int'l L. Comm'n 207	191, 192, 209
<i>Summary Records of the 324th Meeting</i> , [1955] 1 Y.B. Int'l L. Comm'n 247	192
<i>Report of the International Law Commission to the General Assembly</i> , 10 U.N. GAOR Supp. (No. 9), U.N. Doc. A/2934 (1955), reprinted in [1955] 2 Y.B. Int'l L. Comm'n 19	192, 193
<i>Summary Records of the 365th and 366th Meetings</i> , [1956] 1 Y.B. Int'l L. Comm'n 187	194
<i>Report of the International Law Commission to the General Assembly</i> , 11 GAOR Supp. (No. 9), U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. Int'l L. Comm'n 253	124, 129-30, 194, 195, 298
U.N. Conference on the Law of the Sea, Official Records, U.N. Docs. A/CONF.13/37-39 (1958) (3 vols.)	186
U.N. Doc. A/CONF.13/C.1/L.101 (1958), U.N. Conference on the Law of the Sea, 3 Official Records 227	195
U.N. Doc. A/CONF.13/C.1/L.109 (1958), U.N. Conference on the Law of the Sea, 3 Official Records 241	195
U.N. Doc. A/CONF.13/C.1/L.112 (1958), U.N. Conference on the Law of the Sea, 3 Official Records 242	299-300

U.N. Doc. A/CONF.13/C.1/L.116 (1958), U.N. Conference on the Law of the Sea, 3 Official Records 243	130
U.N. Conference on the Law of the Sea, 1st Comm., 47th mtg., 3 Official Records 144 (1958)	196
U.N. Conference on the Law of the Sea, 1st Comm., 52d mtg., 3 Official Records 160 (1958)	300
U.N. Conference on the Law of the Sea, 19th plen. mtg., 2 Official Records 61 (1958)	196, 300
U.N. Office for Ocean Affairs and the Law of the Sea, <i>The Law of the Sea: Baselines, an Examination of the Relevant Provisions of the United Nations Convention on the Law of the Sea</i> , U.N. Sales No. E.88.V.5 (corrected printing 1989)	17, 198

Pleadings, Briefs, Arguments

UNITED STATES V. CALIFORNIA

Memorandum of the United States in Response to Request of Special Master of June 29, 1949, <i>United States v. California</i> (No. 11, Orig.) (U.S. Ex. 85-202, Ak. Ex. 85-63)	76-78, 87-88, 90
Brief for the United States in Answer to California's Exceptions to the Report of the Special Master (June 1964) (Ak. Ex. 85-16), <i>United States v. California</i> , 381 U.S. 139 (1965)	131-32
Brief in Support of Exceptions of the State of California to the Report of the Special Master Dated October 14, 1952, Pursuant to Court Order of December 2, 1963, <i>United States v. California</i> , 381 U.S. 139 (1965)	153

UNITED STATES V. LOUISIANA

Brief for the United States in Support of Motion for Judgment (Feb. 1957) (Ak. Ex. 85-6), <i>United States v. Louisiana</i> , 363 U.S. 1 (1960)	111-12
Brief for the United States in Support of Motion for Judgment on Amended Complaint (May 1958) (Ak. Ex. 85-7), <i>United States v. Louisiana</i> , 363 U.S. 1 (1960)	91, 112, 114, 115, 137, 146, 149
Reply Brief for the United States (Sept. 1958) (Ak. Ex. 85-14), <i>United States v. Louisiana</i> , 363 U.S. 1 (1960)	84, 112, 116, 137
Motion by the United States for Entry of a Supplemental Decree (No. 1), Proposed Supplemental Decree, and Memorandum in Support of Motion (filed Nov. 23, 1965) (Ak. Ex. 85-167), <i>United States v. Louisiana</i> , 382 U.S. 288 (1965)	155-57
Motion by the United States for Entry of a Supplemental Decree as to the State of Louisiana (No. 2), Proposed Supplemental Decree, and Memorandum in Support of the Motion of the United States and in Opposition to the Motion of the State of Louisiana (filed Jan. 3, 1968) (Ak. Ex. 85-168), <i>Louisiana Boundary Case</i> , 394 U.S. 11 (1969)	159, 160
Brief for the United States (Aug. 1968) (Ak. Ex. 85-36, U.S. Ex. 85-901), <i>United States v. Louisiana</i> , 394 U.S. 11 (1969)	157, 160-61, 162
Reply Brief for the United States (Sept. 1968) (Ak. Ex. 85-53), <i>United States v. Louisiana</i> , 394 U.S. 11 (1969)	162

Brief for the State of Mississippi in Support of Motion for Supplemental Decree (Before the Special Master) (1983) (Ak. Ex. 85-31), <i>United States v. Louisiana</i> , 470 U.S. 93 (1985)	79-80, 94
Reply Brief for the State of Mississippi (1984), <i>United States v. Louisiana (Alabama and Mississippi Boundary Case)</i> , 470 U.S. 93 (1985)	55, 94
Transcript of oral argument (1984), <i>United States v. Louisiana (Alabama and Mississippi Boundary Case)</i> , 470 U.S. 93 (1985) (Ak. Ex. 85-231a)	55
UNITED STATES V. MAINE	
Supplemental Post Trial Brief of the United States (Before the Special Master) (1985) (Ak. Ex. 85-333), <i>United States v. Maine</i> , 475 U.S. 89 (1986) (Massachusetts Boundary Case)	133, 135
FISHERIES CASE	
Application of the United Kingdom, 1951 I.C.J. Pleadings (1 Fisheries Case) (Sept. 24, 1949)	98
Memorial of the United Kingdom (U.K. v. Nor.), 1951 I.C.J. Pleadings (Maps, Fisheries Case), annex III (Jan. 27, 1950)	217, 224
Counter-Memorial of Norway (U.K. v. Nor.), 1951 I.C.J. Pleadings (1 Fisheries Case) (July 31, 1950)	95
Reply of the United Kingdom (U.K. v. Nor.), 1951 I.C.J. Pleadings (2 Fisheries Case) (Nov. 28, 1950)	96, 97
Oral argument of the United Kingdom, 1951 I.C.J. Pleadings (4 Fisheries Case) (Sept. 27, 1951)	96, 98

Other Materials

Hans W. Baade, <i>Proving Foreign and International Law in Domestic Tribunals</i> , 18 Va. J. Int'l L. 619 (1978)	273
Max W. Ball, <i>Petroleum Withdrawals and Restorations Affecting the Public Domain</i> (U.S. Geological Survey Bull. 623, 1916)	412, 425
David W. Barnes, <i>Statistics as Proof</i> (1983)	268
Ernest C. Baynard, <i>Public Land Law and Procedure</i> § 1.1 (1986)	408
P.B. Beazley, <i>Maritime Limits and Baselines: A Guide to Their Delineation</i> (The Hydrographic Society, Spec. Pub. No. 2, 2d ed. rev. 1978) (U.S. Ex. 85-229)	209, 212, 214
Frederick W. Beechey, <i>Narrative of the Voyage of the Blossom</i> (London 1831)	363
<i>Black's Law Dictionary</i>	
6th ed. 1990	321
3d ed. 1933	371
2d ed. 1910	371
S. Whittemore Boggs, <i>Delimitation of the Territorial Sea: The Method of Delimitation Proposed by the Delegation of the United States at the Hague Conference for the Codification of International Law</i> , 24 Am. J. Int'l L. 541 (1930) (Ak. Ex. 85-61, U.S. Ex. 85-223)	71, 73, 75, 79, 80, 88, 96, 116, 127, 188
S. Whittemore Boggs, <i>Delimitation of Seaward Areas under National Jurisdiction</i> , 45 Am. J. Int'l L. 240 (1951) (Ak. Ex. 85-96, U.S. Ex. 85-224)	88, 127, 128

Susan B. Boyd, <i>The Legal Status of the Arctic Sea Ice: A Comparative Study and a Proposal</i> , 22 Can. Y.B. Int'l L. 98 (1984)	274
E.D. Brown, <i>Sea-Bed Energy and Mineral Resources and the Law of the Sea: The Areas Within National Jurisdiction</i> (1984)	199
John L. Burdick et al., <i>Cold Regions: Descriptions and Geotechnical Aspects</i> , in <i>Geotechnical Engineering for Cold Regions 1</i> (Orlando B. Andersland & Duwayne M. Anderson eds. 1978)	271
Jonathan I. Charney, <i>The Offshore Jurisdiction of the States of the United States and the Provinces of Canada—A Comparison</i> , 12 Ocean Dev. & Int'l L. 301 (1983), also in <i>The Law of the Sea and Ocean Industry: New Opportunities and Restraints</i> 426 (Douglas M. Johnston & Norman G. Letalik eds., 1984)	171
C. John Colombos, <i>The International Law of the Sea</i> (6th rev. ed. 1967)	273
<i>CRC Standard Mathematical Tables</i> (William H. Beyer ed., 28th ed. 1987)	180
1 Kenneth C. Davis & Richard J. Pierce, Jr., <i>Administrative Law Treatise</i> (3d ed. 1994)	335
Denis P. Duffey, <i>The Northwest Ordinance as a Constitutional Document</i> , 95 Colum. L. Rev. 929 (1995)	384
Euclid, <i>The Thirteen Books of Euclid's Elements</i> (Thomas L. Heath trans., 2d ed., Dover reprint 1956) (ca. 300 B.C.)	213
<i>The Federalist</i> No. 81 (Alexander Hamilton)	520

Michael O. Finkelstein & Bruce Levin, <i>Statistics for Lawyers</i> (1990)	251, 268
Sir Gerald Fitzmaurice, <i>The Territorial Sea and the Contiguous Zone</i> , 8 Int'l and Comp. L.Q. 73 (1959) (Ak. Ex. 85-406)	197
Stewart French & John C. Reed, <i>Boundaries and Status of Naval Petroleum Reserve No. 4</i> (Arctic Inst. of N. Am., July 1971 & rev. & expanded Sept. 1971) (Ak. Exs. 102, 103)	349-50, 380
Thomas W. Fulton, <i>The Sovereignty of the Sea</i> (1911)	290, 291
Hugo Grotius, <i>Of War and Peace</i>	57
1 Green H. Hackworth, <i>Digest of International Law</i> (1940) (Ak. Ex. 85-52)	67-68
William E. Hall, <i>International Law</i> (4th ed. 1895) (Ak. Ex. 85-32)	65, 67
Robert D. Hodgson, <i>Islands: Normal and Special Circumstances</i> , in <i>Law of the Sea: The Emerging Regime of the Oceans</i> 137 (John K. Gamble & Giulio Pontecorvo eds. 1974)	272
Robert D. Hodgson & Lewis M. Alexander, <i>Towards an Objective Analysis of Special Circumstances</i> (Law of the Sea Inst., Univ. of R.I., Occasional Paper No. 13, 1972) (Ak. Exs. 85-401, -403, U.S. Ex. 85-222)	206, 209, 212, 214
R.H. Kennedy, <i>A Brief Geographical and Hydrographical Study of Straits Which Constitute Routes for International Traffic</i> , U.N. Doc. A/CONF.13/6 & Add. 1, in U.N. Conference on the Law of the Sea, 1 Official Records 114, U.N. Doc. A/CONF.13/37 (1958)	70

Ernest de K. Leffingwell, <i>The Canning River Region, Northern Alaska</i> (U.S. Geological Survey Professional Paper 109, 1919) (U.S. Ex. 84A-135)	241, 363, 429
Myres S. McDougal & William T. Burke, <i>The Public Order of the Oceans</i> (1962)	303
Vincent L. McKusick, <i>Discretionary Gatekeeping: The Supreme Court's Management of Its Original Jurisdiction Docket Since 1961</i> , 45 Me. L. Rev. 185 (1993), reprinted in 138 Proc. Am. Phil. Soc'y 195 (1994)	7
H.A. Marmer, <i>Tidal Datum Planes</i> (U.S. Dep't of Commerce, Special Pub. No. 135, rev. ed. 1951) (U.S. Ex. 84A-404)	235, 236, 237, 238, 258
H.A. Marmer, <i>Tidal Datum Planes</i> (U.S. Dep't of Commerce, Special Pub. No. 135, 1927)	235
George C. Martin, <i>Preliminary Report on Petroleum in Alaska</i> (U.S. Geological Survey Bull. 719, 1921)	428-29
Jørgen Molde, <i>The Status of Ice in International Law</i> , 51 Nordisk Tidsskrift for International Ret 164 (1982)	274
1 John B. Moore, <i>Digest of International Law</i> (1906)	70, 102
1 Daniel P. O'Connell, <i>The International Law of the Sea</i> (I.A. Shearer ed. 1982)	182, 204, 273-74, 297
Donald J. Orth, <i>Dictionary of Alaska Place Names</i> (U.S. Geological Survey Professional Paper 567, rev. 1971) (Ak. Ex. 75)	361, 362, 363
<i>Oxford English Dictionary</i> (compact ed. 1971)	320-21

R.S. Patton, <i>The Three-Mile Limit</i> [1930] (Ak. Ex. 85-56, U.S. Ex. 85-200)	187
G. Etzel Percy, <i>Measurement of the U.S. Territorial Sea</i> , Dep't St. Bull., June 29, 1959, at 963 (Ak. Ex. 85-138), reprinted as Dep't of State Pub. 6879, General Foreign Policy Series 139 (U.S. Ex. 85-231)	136, 164
Donat Pharand, <i>The Law of the Sea of the Arctic</i> (1973)	273-74
Richard R. Powell, <i>The Law of Real Property</i> (rev. ed. 1988)	370
Malcolm J. Proudfoot, <i>Measurement of Geographic Area</i> (U.S. Dep't of Commerce, Bureau of the Census, 1946) (excerpted in Ak. Ex. 85-77 and U.S. Ex. 85-706)	80-83
Reginald W. Ragland, <i>A History of the Naval Petroleum Reserves and of the Development of the Present National Policy Respecting Them</i> (1944)	412, 428
Peter Raven-Hansen, <i>Regulatory Estoppel: When Agencies Break Their Own "Laws,"</i> 64 Tex. L. Rev. 1 (1985)	335
John C. Reed & Stewart French, <i>Boundaries, and Status of Land and Resources, of Naval Petroleum Reserve No. 4</i> (Arctic Inst. of N. Am., rev. & expanded Mar. 1975) (Ak. Ex. 105)	354
Restatement of the Foreign Relations Law of the United States (Tent. Draft No. 1, Apr. 26, 1957)	125
Restatement of the Foreign Relations Law of the United States (Tent. Draft No. 2, May 8, 1958)	125

Restatement (Third) of the Foreign Relations Law of the United States (1986)	186
Aaron L. Shalowitz, <i>The Concept of a Bay as Inland Waters</i> , 13 Surveying and Mapping 432 (1953) (Ak. Exs. 85-43, 85-336)	187
Aaron L. Shalowitz, <i>Shore and Sea Boundaries</i> (U.S. Dep't of Commerce Pub. 10-1, 1962-64) (2 vols.)	16, 22, 53, 59, 60, 84, 85, 88-93, 94, 99, 100, 101, 102, 103, 104, 108, 111, 115, 128, 134, 142, 147, 156, 173, 187, 188, 231, 232, 234, 235, 236, 237, 258, 259, 261, 262, 297, 299, 370, 376-77, 381, 414, 486
David Shapiro, <i>Some Thoughts on Intervention Before Courts, Agencies and Arbitrators</i> , 81 Harv. L. Rev. 721 (1968)	545
George W. Skadel, <i>The Coastal Boundaries of Naval Petroleum Reserve No. 4</i> (University of Alaska Sea Grant Program, Alaska Sea Grant Rep. No. 73-12, 1974) (Ak. Ex. 10)	360, 380
P.S. Smith & J.B. Mertie, Jr., <i>Geology and Mineral Resources of Northwestern Alaska</i> (U.S. Geological Survey Bull. 815, 1930)	429
Robert L. Swanson, <i>Variability of Tidal Datums and Accuracy in Determining Datums from Short Series of Observations</i> (National Oceanic & Atmospheric Admin. Tech. Rep. NOS 64, 1974) (Ak. Ex. 84A-707)	268
Robert W. Swensen, <i>Legal Aspects of Mineral Resources Exploitation</i> , in Paul W. Gates, <i>History of Public Land Law Development</i> (1968)	411-12

Clive Symmons, <i>The Maritime Zones of Islands in International Law</i> (1979)	273, 274
Donald M. Taylor, <i>Man-made Permafrost Islands for Offshore Drill Sites?</i> <i>Ocean Industry</i> , Nov. 1972, at 42	272-73
Bo J. Theutenberg, <i>The Evolution of the Law of the Sea: A Study of Resources and Strategy with Special Regard to the Polar Regions</i> (1984)	274
James E. Thompson, <i>Geometry for the Practical Man</i> (M. Peters ed., 3d ed. 1962)	213
Kathleen L. Walz, <i>The United States Supreme Court & Article VII of the 1958 Convention on the Territorial Sea & Contiguous Zone</i> , 11 U.S.F. L. Rev. 1 (1976)	212, 213
Gayl S. Westerman, <i>The Juridical Bay</i> (1987)	183, 199
<i>Webster's Collegiate Dictionary</i> (3d ed. 1916)	372
<i>Webster's Ninth New Collegiate Dictionary</i> (1987)	321
Charles F. Wheatley, Jr., <i>Study of Withdrawals and Reservations of Public Domain Lands</i> (U.S. Public Land Law Review Comm'n, 1 Background Studies, 1969 & photo. reprint)	395, 473
Charles A. Wright & Arthur H. Miller, <i>Federal Practice and Procedure, Civil §§ 1909, 1917</i> (1972)	525-26, 548
Charles A. Wright, Arthur H. Miller, & Edward H. Cooper, <i>Federal Practice and Procedure, Jurisdiction § 4416</i> (1981)	553

IN THE
Supreme Court of the United States

OCTOBER TERM, 1995

No. 84, Original

UNITED STATES OF AMERICA,
Plaintiff,

v.

STATE OF ALASKA

REPORT OF THE SPECIAL MASTER

Drew S. Days, III, Solicitor General, United States Department of Justice, for plaintiff.

Bruce Bothelo, Attorney General of Alaska, for defendant.

APPEARANCES

Louis F. Claiborne, Deputy Solicitor General and Special Assistant to the Solicitor General; Michael W. Reed and Charles W. Findlay, III, Environment and Natural Resources Division, U.S. Department of Justice, for plaintiff.

G. Thomas Koester, Assistant Attorney General of Alaska and attorney, Juneau, Alaska; John Briscoe, Washburn, Briscoe & McCarthy, San Francisco, California, for defendant.

Mason D. Morisset, Zientz, Pirtle, Morisset, Ernstoff & Chestnut, Seattle, Washington, for intervenors Inupiat Community of the Arctic Slope and Ukpeagvik Inupiat Corporation.

James R. Atwood, Covington & Burling, Washington,

D.C., for Amoco Production Co. et al. as *amici curiae*
opposing the motion for leave to intervene.

I INTRODUCTION

A. Nature of the controversy

These proceedings concern the rights to lands underlying tidal waters off the Arctic coast of Alaska. The objective is to identify the lands belonging, respectively, to the United States and the State of Alaska. Important oil and gas reserves have been discovered nearby, and the controversy arose from the desire of both sovereigns to grant leases for exploration of these offshore areas.

The rights of the United States and Alaska depend on interpretation of the Submerged Lands Act, 43 U.S.C. §§ 1301-1315 (1988), and related doctrine. In general, the Submerged Lands Act grants to the states the lands under tidal waters out to three miles from their coastlines, and the United States retains the rights over resources of the continental shelf beyond the three-mile limit.

Determining the rights of the parties involves two kinds of issues. One is the location of the coastline from which the three-mile belt is to be measured. The other is what lands under tidal waters, if any, are part of federal reservations along the Arctic coast and are excepted from the operation of the Submerged Lands Act.

B. Initial proceedings

On May 30, 1979, the United States moved the Court for leave to file an original bill of complaint, setting out a dispute over the right to offer lands in the Beaufort Sea for mineral leasing. Alaska expressly acquiesced. Memorandum of Nonopposition to Motion for Leave to File Complaint (June 8, 1979). The Court granted the motion on June 18, 1979. 442 U.S. 937.

The complaint stated that the submerged lands in contro-

versy, in the view of the United States, were located in the Beaufort Sea "more than three geographical miles seaward from the ordinary low-water mark and from the outer limit of inland waters along the coast of Alaska." Complaint, ¶ IV. Alaska submitted its Answer to the Complaint on September 12, 1979. At the same time, the State sought leave to file a counterclaim alleging that the United States also claimed rights along the north coast of Alaska in submerged lands under certain inland waters. Counterclaim, ¶ IV.

In particular the counterclaim sought a decree quieting Alaska's title to the offshore submerged lands lying inside the barrier islands north of the Arctic National Wildlife Range and to the submerged lands underlying the inland waters of Harrison Bay, Smith Bay and Peard Bay. The Wildlife Range (now called the Arctic National Wildlife Refuge) faces on the eastern part of the Arctic coast, between approximately 141° and 146° west longitude. The three named bays are in or adjacent to the National Petroleum Reserve-Alaska, which lies on the west side of the Arctic coast between about 151° and 162° west longitude. By comparison, the dispute that gave rise to the United States' complaint was focused primarily on the coast between 146° and 150° west longitude, around Prudhoe Bay. See figure 1.1.

The United States, while denying the claims advanced by Alaska, agreed that leave ought to be granted to the State to file its counterclaim. See Memorandum of the United States in Response to Alaska's Motion for Leave to File Counterclaim and Answer to Counterclaim (Dec. 14, 1979).

The Court appointed the Special Master on February 19, 1980, 444 U.S. 1065, and it referred the Motion for Leave to File Counterclaim to the Master on March 3, 1980, 445 U.S. 914.

C. Alaska's counterclaim

At the urging of the parties and for the reasons elaborated below, the Master determined to consider the issues tendered by the counterclaim—subject, of course, to this Court's ultimate ruling.

In the complaint the United States sought a decree declaring its rights as against Alaska "in the subsoil and seabed underlying the waters adjacent to Alaska in the area of the Beaufort Sea" and enjoining interference with those rights. Complaint at 6. The rights of the United States in the Beaufort Sea depend on the issues raised by the counterclaim as well as those raised by the complaint. Both the Arctic National Wildlife Refuge and the National Petroleum Reserve-Alaska border the Beaufort Sea, which extends along the Arctic coast eastward from Point Barrow.¹ As to the Petroleum Reserve, the State had already instituted litigation in the district court. *Alaska v. United States*, Civ. No. J75-13 (D. Alaska; renumbered No. A78-069; partial consent judgment entered Dec. 7, 1984; dismissed Nov. 26, 1986). As to the Wildlife Refuge, the State had previously informed the Department of the Interior that it intended to challenge the federal position. Memorandum in Support of Motion for Leave to File Counterclaim, at 15 n.1.

The Court's original jurisdiction to entertain the counterclaim, like the complaint, is conferred by Article III, section 2, clause 2 of the Constitution and 28 U.S.C. § 1251(b)(2) (1988). Consent to suit is to be found in 28 U.S.C. § 2409a (1988). *California v. Arizona*, 440 U.S. 59 (1979); *California ex rel. State Lands Comm'n v. United States*, 457 U.S. 273 (1982). Although the federal district courts have concurrent jurisdiction, the Court has repeatedly indicated that

¹ The Arctic coastline of the Petroleum Reserve also includes a portion facing the Chukchi Sea, from Point Barrow west to Icy Cape.

coastal boundary disputes between the United States and a state should be resolved in original suits here. *California ex rel. State Lands Comm'n v. United States*, 457 U.S. at 277 n.6; *United States v. Alaska*, 422 U.S. 184, 186 n.2 (1975); *United States v. Louisiana*, 363 U.S. 1, 85 n.143 (1960). Accordingly, it seems clear that the issues raised by the counterclaim should, sooner or later, be brought before the Court.

To avoid piecemeal litigation, the parties and the Special Master have deemed it proper to treat them now. It is true that the issues raised by the counterclaim could have been considered separately and that the Court has been willing to entertain the same case again and again until all issues are finally resolved. *E.g.*, *United States v. Louisiana*, 339 U.S. 699 (1950); *id.*, 363 U.S. 1 (1960); *id.*, 382 U.S. 288 (1965); *id.*, 394 U.S. 11 (1969); *id.*, 404 U.S. 388 (1971); *id.*, 409 U.S. 17 (1972); *id.*, 420 U.S. 529 (1975); *id.*, 422 U.S. 13 (1975); *id.*, 446 U.S. 253 (1980); *id.*, 452 U.S. 726 (1981); *id.*, 456 U.S. 865 (1982). But the burden of these cases on a crowded docket makes it desirable, when possible, to combine all maritime boundary controversies pertaining to the same area in a single proceeding. This entails granting Alaska leave to file its counterclaim.

The Master further agreed, at the parties' urging, that he might proceed to hear the counterclaim without first submitting an interim report on the motion for leave to file. The order appointing the Special Master authorized him to "fix the time and conditions for the filing of additional pleadings," to "direct subsequent proceedings," and to "submit such reports as he may deem appropriate." 444 U.S. 1065. The issues raised by the counterclaim related to the same geographic area already in controversy; they could equally well have been raised by an amended complaint; and they did not require the exercise of the Court's original jurisdic-

tion beyond familiar bounds. The Court has consistently agreed to hear federal-state disputes over submerged lands and boundaries.² And the Court has stated that its "object in original cases is to have the parties, as promptly as possible, reach and argue the merits of the controversy presented." *Ohio v. Kentucky*, 410 U.S. 641, 644 (1973).

To that end, the parties have submitted and the present Report recommends resolution of all the issues that must be answered to fix the lines delimiting Alaska's submerged lands underlying tidal waters for the whole of its Arctic coast from the Canadian border to Icy Cape. Accordingly, I recommend that Alaska's Motion for Leave to File Counterclaim be granted *nunc pro tunc*.

D. The joint statements of questions presented

To identify the disputed issues with particularity, the parties submitted to the Special Master in May 1980 a Joint Statement of Questions Presented and Contentions of the Parties.³ Some ten issues were identified. After a first evidentiary hearing in July 1980, and partly as a result of expert testimony there given, it became necessary to augment the Statement of Questions Presented. A Supplement to the Joint Statement, adding three questions, was filed in September 1980. Two more issues were added by a Second Supplement to the Joint Statement, filed in July 1984.

The entire list of fifteen questions, in their original order

² See Vincent L. McKusick, *Discretionary Gatekeeping: The Supreme Court's Management of Its Original Jurisdiction Docket Since 1961*, 45 Me. L. Rev. 185, 200, 211 (1993), reprinted in 138 Proc. Am. Phil. Soc'y 195, 209, 219 (1994).

³ The original Joint Statement and the two Supplements thereto are readily identifiable in the Special Master's record as the only printed documents filed initially with him.

but without the statements of contentions, is given in Appendix A. The first question, whether Alaska should be granted leave to file its counterclaim, has already been treated above. The body of this report deals with the remaining questions, grouping them according to subject matter.

E. The motion for leave to intervene

On May 12, 1981, the Inupiat Community of the Arctic Slope and the Ukpeagvik Inupiat Corporation moved for leave to intervene in the case, claiming rights over areas in dispute between the United States and Alaska. On June 8, the Court referred the motion to the Special Master. 452 U.S. 913. Briefs opposing the motion were filed by the original parties and, as *amici curiae*, by Amoco Production Company et al., the mineral lessees of a portion of the contested area.⁴ The movants filed a reply brief. The Master heard oral argument on the intervention motion on March 26, 1982.⁵

On the Inupiat's theory of the case, their rights were to areas beyond the three-mile limit. Several of the issues in the Joint Statement and Supplement affected the location of the three-mile limit, since they involved determining the coastline from which the three miles are measured. On the issues as framed by the original parties, the Inupiat were

⁴ To permit mineral leasing during this litigation, the parties entered an interim agreement on October 26, 1979, as authorized by the Outer Continental Shelf Lands Act, § 7, 43 U.S.C. § 1336 (1988), and Alaska Stat. Ann. § 38.05.137 (1989). See Joint Statement 2 & App. I. A joint federal-state lease sale, covering the area between 146° and 150° west longitude, was held in December 1979. I am informed that oil company bonuses from the lease sale amount to very large sums, now in escrow. Their disposition awaits the final outcome of this suit.

⁵ Unlike most of the transcript, the volume for March 26, 1982, is not numbered.

aligned with the United States in seeking to maximize the area beyond the three-mile limit. Ultimately, the Inupiat's interests were adverse to the United States, and they were pursuing their claim in the federal district court. *Inupiat Community v. United States*, Civil No. A81-019 (D. Alaska, filed Jan. 19, 1981).

The Master's report on the intervention motion (Appendix B) was submitted to the Court on January 10, 1984. For the reasons there stated, the report recommended that the motion to intervene be granted, subject to several restrictions. In general, the intervention was to be limited to issues not yet submitted; the intervenors were to be restricted to supporting the position of the United States; and their participation was to continue so long as they could credibly claim an interest in the disputed areas. Report of Jan. 10, 1984, at 40-42. An order implementing these recommendations was issued on the same day (Appendix C).

At the suggestion of the Master, supported by all parties, the Court did not immediately review the report on intervention, merely ordering it filed. 465 U.S. 1018 (Feb. 21, 1984).

A final decision against the intervenors, in their separate suit against the United States, was reached in 1985. *Inupiat Community v. United States*, 548 F. Supp. 182 (D. Alaska 1982) (granting summary judgment for defendants), *aff'd*, 746 F.2d 570 (9th Cir. 1984), *cert. denied*, 474 U.S. 820 (1985). By a letter of October 23, 1985, the intervenors informed the Special Master that they no longer appeared to satisfy the conditions for continued participation in the present action. Accordingly, the Master issued an order on June 3, 1986 (Appendix D), dismissing the intervenors from further participation, but not from their obligation to bear their due share of costs, as ultimately determined by the Court, for the period during which they participated.

F. Additional proceedings before the Special Master

Two of the questions presented in the Joint Statement and supplements did not require the taking of evidence. One was the question of Alaska's counterclaim (question 1). The other was subsequently settled by a joint survey and a stipulation (question 14).

By agreement, the other questions were divided into three groups for the purposes of trial. It was decided first to hear evidence and argument on the questions pertaining to the National Petroleum Reserve-Alaska (questions 7 and 8 and, as later added, question 11), the Arctic National Wildlife Refuge (questions 9 and 10), and the effect on the coastline of a pier extension at Prudhoe Bay (question 6). The evidence was heard on July 28 and 29, 1980.

Post-trial briefs on these issues were filed in November 1980 and February 1981. On March 24, 1981, however, the Court decided *Montana v. United States*, 450 U.S. 544, which Alaska suggested significantly affected the claim to tidal water bottoms within the Petroleum Reserve and the Wildlife Refuge. After a lapse of time due to the intervention proceedings, the United States and Alaska submitted a joint motion respecting the issues of these areas on October 31, 1983.

The Master granted the motion by an order of January 4, 1984, noting that the subject matter had no implications for the Inupiat petitioners for intervention. As will be explained more fully in section VIII, the order relieved the State of a concession it had made and invited supplemental briefs on the relevance of the *Montana* case. At the same time, a newly discovered map was permitted to be introduced in evidence. The supplemental briefs and reply briefs were submitted in January and February 1984. The Master heard oral argument on the same issues, together with the issue of the pier extension, on March 4, 1985. Transcript [hereafter "Tr."], vol. 17. A second set of supplemental briefs was

prompted by the Court's decision in *Utah Division of State Lands v. United States*, 482 U.S. 193 (1987), and these briefs were received in September and October 1987.

The second set of evidentiary hearings was confined to a single issue from the Joint Statement, the status as an island of a formation known as Dinkum Sands (question 5). These hearings, requiring nearly three weeks, took place in July and August 1984, with the participation of the intervenors as well as the original parties. Briefs were submitted in March and May 1985. The Master heard oral argument on the Dinkum Sands issue in June 1986. Tr., vol. 24.

Finally, in May and June 1985, the last group of issues was reached for hearing: the effect of offshore islands on the legal coastline (questions 2, 3, 4, 12, and 13) and the status of southern Harrison Bay as a juridical bay (question 15). Briefing followed in the fall of 1985 and spring of 1986, and final oral arguments were held in November 1986. Tr., vol. 25. The intervenors did not participate in these proceedings.

Besides the formal hearings, the Master has made a site visit to the Prudhoe Bay area with counsel for Alaska and the United States. The visit took place on July 31 and August 1, 1980, just after the first evidentiary hearings, and included observations of Dinkum Sands (question 5) and the pier extension at Prudhoe Bay (question 6).

As the several parts of the report were completed in draft, the Master has circulated them to the representatives of the parties, under an order for confidentiality, for technical review and comment.⁶ The circulation process, which began

⁶ Rule 53(e)(5) of the Federal Rules of Civil Procedure provides: "Before filing the master's report a master may submit a draft thereof to counsel for all parties for the purpose of receiving their suggestions." Supreme Court Rule 17.2 states that the Federal Rules, "when their application is appropriate, may be taken as a guide to procedure in an original action in this Court."

For precedents for circulating a draft report to counsel in original

in 1989, has proved a valuable aid to accuracy. As now submitted, the Report incorporates both technical corrections and revisions reflecting the Master's own further review.

**PART ONE
ALASKA'S COASTLINE**

actions, see *Texas v. New Mexico*, Report of Special Master Charles J. Meyers, at 4 (1986), *exceptions sustained in part and overruled in part*, 482 U.S. 124 (1987); *Arizona v. California*, Report of Special Master Simon H. Rifkind (1960), at 3, *approved in part and disapproved in part*, 373 U.S. 546 (1963).

II THE LEGAL BACKGROUND

All the issues concerning the location of Alaska's coastline share the same legal background, outlined here.

It was long the received doctrine that new states, upon their admission to the Union, in general become vested with title to the beds of navigable waters within state boundaries. *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845); *Shively v. Bowlby*, 152 U.S. 1, 26-31 (1894). In 1947, the Court qualified this rule to distinguish between inland navigable waters, such as lakes and rivers, and the marginal sea traditionally claimed as a three-mile belt along the Nation's coasts. The Court explained that the precedents had involved only inland navigable waters. For the marginal sea, it held that federal rights were paramount:

[W]e are not persuaded to transplant the *Pollard* rule of ownership as an incident of state sovereignty in relation to inland waters out into the soil beneath the ocean, so much more a matter of national concern. If this rationale of the *Pollard* case is a valid basis for a conclusion that paramount rights run to the states in inland waters to the shoreward of the low water mark, the same rationale leads to the conclusion that national interests, responsibilities, and therefore national rights are paramount in waters lying to the seaward in the three-mile belt.

United States v. California, 332 U.S. 19, 36 (1947). With the Court's decision in *California*, the right to issue oil and gas leases in coastal waters came to rest with the states if the waters qualified as inland, and otherwise with the Federal Government. The Court recognized, however, that there might be "many complexities and difficulties" in locating the exact line between inland waters, including harbors, bays, and rivers, and the marginal sea. *Id.* at 26.

The distinction between inland waters and the marginal

sea was traditionally a distinction of international law. Under that tradition, the sea is divided into inland waters, the marginal or territorial sea, and the high seas. See *United States v. Louisiana (Alabama and Mississippi Boundary Case)*, 470 U.S. 93, 98-99 (1985); *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 22-23 (1969); 1 Aaron L. Shalowitz, *Shore and Sea Boundaries* 22-24 (U.S. Dep't of Commerce Pub. 10-1, 1962). With the 1947 *California* decision, the international distinction was seemingly made applicable to a domestic controversy between the Federal Government and a state.

Congress disagreed with the 1947 *California* decision. In May 1953 it enacted the Submerged Lands Act, ch. 65, 67 Stat. 29 (codified as amended at 43 U.S.C. §§ 1301-1315 (1988)), which gave the states all the United States' right, title, and interest in "lands beneath navigable waters within the boundaries of the respective States." § 3(a)-(b)(1), 43 U.S.C. § 1311(a)-(b)(1). These included lands out to a line three miles seaward from the coastline, § 2(a)(2), 43 U.S.C. § 1301(a)(2), and for most states were not to extend beyond this three-mile belt, § 2(b), 43 U.S.C. § 1301(b). The Act defined the term "coast line" to mean "the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters." § 2(c), 43 U.S.C. § 1301(c). The phrase "inland waters" was still left undefined.¹

The next major development was an international one. In April 1958, the first United Nations Conference on the Law of the Sea adopted a convention that did attempt to define

¹ As to lands of the continental shelf lying beyond those granted to the states, Congress confirmed federal jurisdiction and control. Submerged Lands Act § 9, 43 U.S.C. § 1302; Outer Continental Shelf Lands Act, ch. 345, § 2(a), 3, 67 Stat. 462 (Aug. 7, 1953) (codified as amended at 43 U.S.C. §§ 1331(a), 1332 (1988)).

inland waters. Convention on the Territorial Sea and the Contiguous Zone, done Apr. 29, 1958, 15 U.S.T. 1606, 516 U.N.T.S. 205. This Convention, which the United States signed in 1958, was approved by the Senate in 1960 and ratified by the President in 1961. The Convention took effect in 1964 upon approval by the requisite number of nations.²

In 1965, the Court handed down its second decision in the *California* litigation, this time on the meaning of "inland waters" in the Submerged Lands Act. *United States v. California*, 381 U.S. 139 (1965). The Court found first that Congress had meant to leave the definition of "inland waters" to the courts. 381 U.S. at 150-60. It noted that the 1947 opinion "clearly indicated that 'inland waters' was to have an international content," and it found that, unlike the situation in 1947, the Convention now provided "a settled international rule defining inland waters." 381 U.S. at 162, 163. The Court concluded that the meaning of "inland waters" in the Submerged Lands Act should conform to the Convention:

It is our opinion that we best fill our responsibility of giving content to the words which Congress employed by adopting the best and most workable definitions available.

² The relevant provisions of the 1958 Convention have in general been carried forward, with some additions, into a later treaty. United Nations Convention on the Law of the Sea, done Dec. 10, 1982, in *The Law of the Sea*, U.N. Sales No. E.83.V.5 (1983). See also U.N. Office for Ocean Affairs and the Law of the Sea, *The Law of the Sea: Baselines, an Examination of the Relevant Provisions of the United Nations Convention on the Law of the Sea*, U.N. Sales No. E.88.V.5 (corrected printing 1989).

The United States did not sign the Law of the Sea Convention in 1982 because it opposed the provisions, not relevant here, on deep seabed mining. An agreement changing these provisions was reached in July 1994, and the convention and agreement have now been transmitted to the Senate for advice and consent. S. Treaty Doc. No. 39, 103d Cong., 2d Sess. (Oct. 7, 1994).

The Convention on the Territorial Sea and the Contiguous Zone, approved by the Senate and ratified by the President, provides such definitions. We adopt them for purposes of the Submerged Lands Act. This establishes a single coastline for both the administration of the Submerged Lands Act and the conduct of our future international relations (barring an unexpected change in the rules established by the Convention). Furthermore the comprehensiveness of the Convention provides answers to many of the lesser problems related to coastlines which, absent the Convention, would be most troublesome.

Id. at 165 (footnotes omitted).

Alaska was admitted to the Union in 1959, after passage of the Submerged Lands Act and negotiation of the Convention, but before the United States ratified the Convention and before the second *California* decision. The Alaska Statehood Act, approved on July 7, 1958, provided:

The Submerged Lands Act of 1953 . . . shall be applicable to the State of Alaska and the said State shall have the same rights as do existing States thereunder.

Alaska Statehood Act, Pub. L. No. 85-508, § 6(m), 72 Stat. 339, 343 (1958), *reprinted as amended in* 48 U.S.C. note preceding § 21 (1988). Admission followed by presidential proclamation on January 3, 1959. Proclamation No. 3269, 3 C.F.R. 4 (1959-1963), *reprinted in* 48 U.S.C. note preceding § 21, at 15 (1988).³

³ Late in 1988 President Reagan issued a proclamation extending the territorial sea to twelve miles. Proclamation No. 5928, 3 C.F.R. 547 (1988), *reprinted in* 43 U.S.C. § 1331 note (1988). The change appears not to affect the federal-state rights at issue in this case, for the Submerged Lands Act grant is not framed in terms of the territorial sea, and the proclamation itself states: "Nothing in this Proclamation . . . extends or otherwise alters existing Federal or State law or any jurisdiction, rights, legal interests, or obligations derived therefrom . . ." *Id.*

III

THE EFFECT OF ISLANDS ON THE COASTLINE

When a new state enters the Union, it ordinarily takes title to lands under its inland navigable waters. *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845). In addition, Congress has granted certain submerged lands outside of inland navigable waters to the states. Submerged Lands Act, ch. 65, 67 Stat. 29 (1953) (codified as amended at 43 U.S.C. §§ 1301-1315 (1988)). For purposes of both the *Pollard* doctrine and the Submerged Lands Act, the extent of a state's rights may be affected by the presence of islands offshore.

In this part of the case, the dispute is over the proper method for determining Alaska's rights where there are islands. In questions 2, 3, and 4 of the Joint Statement,¹ the issue is the effect of near-shore islands in the so-called leased area of Alaska's Arctic coast. This stretch of the coastline lies between 146° and 150° west longitude, in the Beaufort Sea; it includes Prudhoe Bay. As to oil and gas leasing of the disputed parts of the area, *see supra* section I, note 4.

Figure 1.1 shows the leased area on a small scale. The National Petroleum Reserve-Alaska is to the west, and the Arctic National Wildlife Refuge is to the east.

Questions 2 and 3 both have to do with methods for locating the dividing line between inland waters and the marginal sea beyond. The question of the dividing line also arises in the areas of the Petroleum Reserve and the Wildlife Refuge. Questions 12 and 13 extend questions 2 and 3 to the entire coast, from Icy Cape to the Canadian border. *See Supplement to Joint Statement.*²

Question 4 concerns another theory of the effect of off-

¹ The language of the questions will be given in section B, *infra*.

² For the Petroleum Reserve and the Wildlife Refuge, the rights of the parties depend also on the questions to be considered in part 2.

shore islands, this one not depending on the seaward limit of inland waters but rather on the particular configuration of islands. Because configurations of the type relevant to question 4 exist only in the leased area, there is no further question extending question 4 geographically.

The Special Master heard evidence on questions 2, 3, 4, 12, and 13 on May 28 through June 4, 1985. The parties filed post-hearing briefs and reply briefs in the fall of 1985 and spring of 1986.³ Final argument was held on November 20, 1986.

A. The United States' position

A positive answer to any of questions 2, 3, 4, 12, and 13 would be an answer in favor of Alaska. The United States' position, which all the questions attack, must be understood as background. I begin with that position and turn later to Alaska's various challenges to it. On the United States' view, all the questions should be answered no.

The United States holds a single theory about how the sources reviewed in section II should be applied to the north

³ In this section of the report, the briefs will be referred to as AB, USB, ARB, and USB. The corresponding full titles are as follows: Alaska's Post-Trial Brief on Questions 2, 3, 4, 12, 13 and 15 of the Joint Statement of Questions Presented and Contentions of the Parties; Post-Trial Memorandum of the United States on Issues 2, 3, 4, 12, 13 and 15; Alaska's Reply Brief on Questions 2, 3, 4, 12, 13 and 15; Post-Trial Rebuttal Memorandum of the United States on Issues 2, 3, 4, 12, 13 and 15. Question 15 is treated separately in section IV, *infra*.

Alaska also presented, on the opening date of trial, a 264-page document titled "Chronological Outline of Relevant Events in American Foreign Policy with Respect to the Delimitation of the Territorial Sea and Other Maritime Zones, 1782-1985." A revised version of the chronology dated June 27, 1995, has been received with consent. A timeline chart to accompany the chronology, revised from a chart originally submitted with Alaska's Reply Brief, was submitted on October 26, 1995.

coast of Alaska. It starts from the Alaska Statehood Act, which applies the Submerged Lands Act to Alaska. By the Submerged Lands Act, in the United States' view, Alaska received submerged lands out to three miles from its coastline. The location of the coastline, under the Submerged Lands Act, depends on the seaward limit of Alaska's inland waters. The identification of Alaska's inland waters, under the 1965 *California* decision, depends on the 1958 Convention.

It now becomes important to review the Convention's definition of inland waters. The Convention defines the dividing line between inland waters (or "internal waters") and the marginal sea (or "territorial sea") in terms of a baseline:

Article 5

1. Waters on the landward side of the baseline of the territorial sea form part of the internal waters of the State.

Normally the baseline is the low-water line along the coast:

Article 3

Except where otherwise provided in these articles, the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State.

Respecting the baseline for islands, the Convention simply provides:

Article 10

2. The territorial sea of an island is measured in accordance with the provisions of these articles.

With a "normal baseline" under Article 3, this means that each island has its own belt of territorial sea.

The territorial sea is measured outward from the baseline, for a distance determined by each nation for itself. The

United States has traditionally claimed three miles—the same width as the standard grant to the states under the Submerged Lands Act. The outer limit of the territorial sea (given the baseline and the width) is constructed by a method called the method of arcs of circles. Article 6 of the Convention defines the result of the method: “The outer limit of the territorial sea is the line every point of which is at a distance from the nearest point of the baseline equal to the breadth of the territorial sea.”⁴

Figure 3.1 shows the normal baseline and the three-mile belt in the presence of coastal islands. The figure is a schematic representation of the United States’ position as to Alaska’s rights in submerged lands. It also illustrates the consequences to which Alaska objects. If offshore islands each have independent three-mile belts, they may create enclaves of federal lands—that is, lands that are more than three miles from any upland but which are wholly surrounded by lands within the three-mile belt. There may also be pockets or cul-de-sacs of federal lands—that is, areas that are largely, though not entirely, so surrounded.⁵

⁴ To envision the working of the method, one may imagine a circle, whose radius is the width of the territorial sea, rolling along the seaward side of the baseline. The outer limit of the territorial sea will be the path traced by the center of the circle. See 1 Aaron L. Shalowitz, *Shore and Sea Boundaries* 169–72 (U.S. Dep’t of Commerce Pub. 10-1, 1962).

⁵ The parties have often referred to these as enclaves or cul-de-sacs of high seas. Since the territorial sea was extended to twelve miles, *supra* section II, note 3, that designation is no longer accurate. It does remain accurate to call the disputed areas enclaves or cul-de-sacs of outer continental shelf lands. See *supra* section II, note 1.

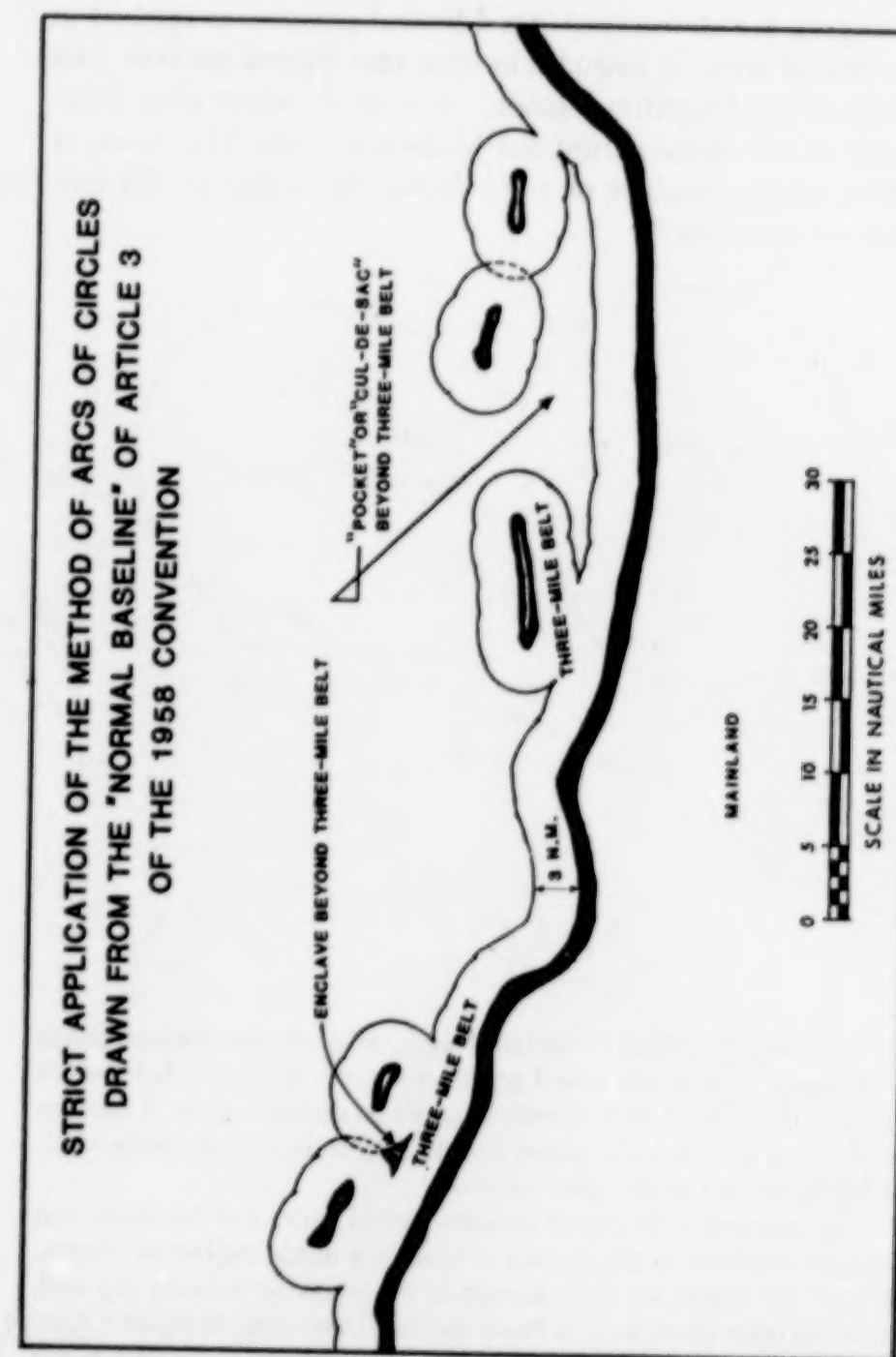
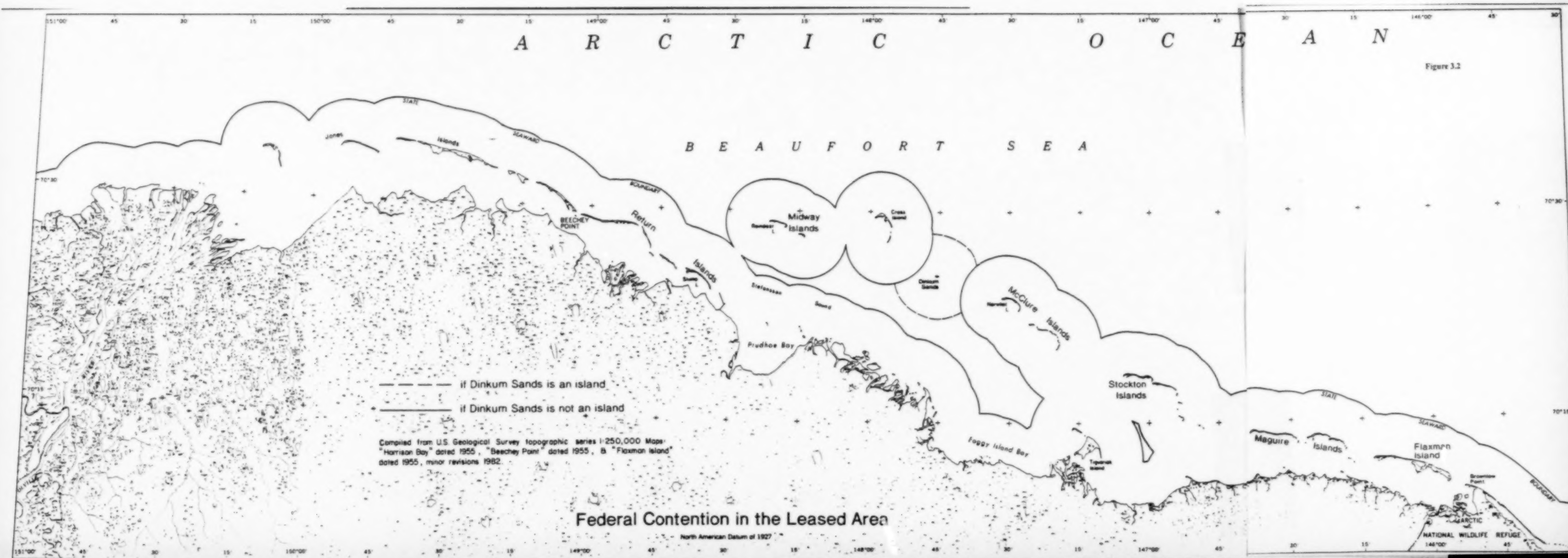


Figure 3.1. The normal baseline and the three-mile belt in the presence of islands.

Figure 3.2 shows the United States' position as applied in the leased area. It includes at least one federal enclave, just south of the Stockton Islands. A second, larger area, landward of the islands from the Midways to the McClures, is either another enclave or a cul-de-sac depending on the outcome of question 5.⁶

⁶ Question 5, treated in section V *infra*, asks whether Dinkum Sands is an island. If it is, the island generates its own three-mile belt, which overlaps the belts of other islands to create an enclave. Even if Dinkum Sands is not an island, the islands that do exist in the vicinity create a cul-de-sac under the United States' position.

East and west of the leased area, the United States does not assert that there are enclaves or cul-de-sacs of high seas inside the barrier islands. Most of the islands are close enough to the mainland to avoid any such result. In other cases, such as Peard Bay and Dease Inlet in figure 1.1, no question of enclaves arises because the waters behind the islands are agreed to form a bay.



B. Alaska's position

Alaska contests the United States' position at several points. Its basic objection, however, is to the claim that there are federal submerged lands that are wholly or largely surrounded by state-owned submerged lands.

The objection is grounded in history. The most salient feature of the history, according to Alaska, is that the United States never claimed there were high seas in such areas until well after Alaska became a state. *E.g.*, Tr. 3532. In Alaska's view, it gained the rights to the disputed lands at statehood, and these rights could not later be taken away. *E.g.*, Tr. 3528-29, 3585-86.

Alaska has proposed three other methods, as alternatives to the United States' method, by which to draw the dividing line between state and federal lands offshore. The first method corresponds to questions 2 and 12 of the Joint Statement; the second method, to questions 3 and 13; and the third method, to question 4. *See* Tr. 2521-25. The methods are introduced briefly below. The legal theories offered in support of the several methods will be treated in later sections.

1. Questions 2 and 12: straight baselines

The Convention provides an alternative to the normal baseline described in section A. Questions 2 and 12 of the Joint Statement refer to this alternate method:

Question 2: Should the extent of Alaska's submerged lands in the leased area be determined on the basis of "straight baselines"?

Question 12: Should the extent of Alaska's offshore submerged lands between Icy Cape and the Canadian border, not included within the "leased area," be determined on the basis of "straight baselines"?

The straight baseline provisions appear in Article 4 of the Convention:

Article 4

1. In localities where the coastline is deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity, the method of straight baselines joining appropriate points may be employed in drawing the baseline from which the breadth of the territorial sea is measured.

2. The drawing of such baselines must not depart to any appreciable extent from the general direction of the coast, and the sea areas lying within the lines must be sufficiently closely linked to the land domain to be subject to the regime of internal waters.

....

6. The coastal State must clearly indicate straight baselines on charts, to which due publicity must be given.

Figure 3.3 illustrates the use of Article 4 baselines for a fringe of islands near the coast, using the same hypothetical coastline as figure 3.1. Straight baselines join the islands; there is no fixed limit on their length. Waters on the landward side of the baselines become inland waters. Extending outward from the straight baselines, which form the seaward limit of inland waters, are both the territorial sea and the three-mile belt granted by the Submerged Lands Act. With a three-mile territorial sea, these coincide.

Alaska proposes the use of Article 4 baselines along the Arctic coast subject to a limitation that no straight baseline be more than ten miles long. For the hypothetical coastline of figures 3.1 and 3.3, the result would be as shown in figure 3.5 (page 31). In the areas actually in dispute, the distances between adjacent islands are in fact all less than ten miles. Figure 3.4 shows, for the leased area, the approximate

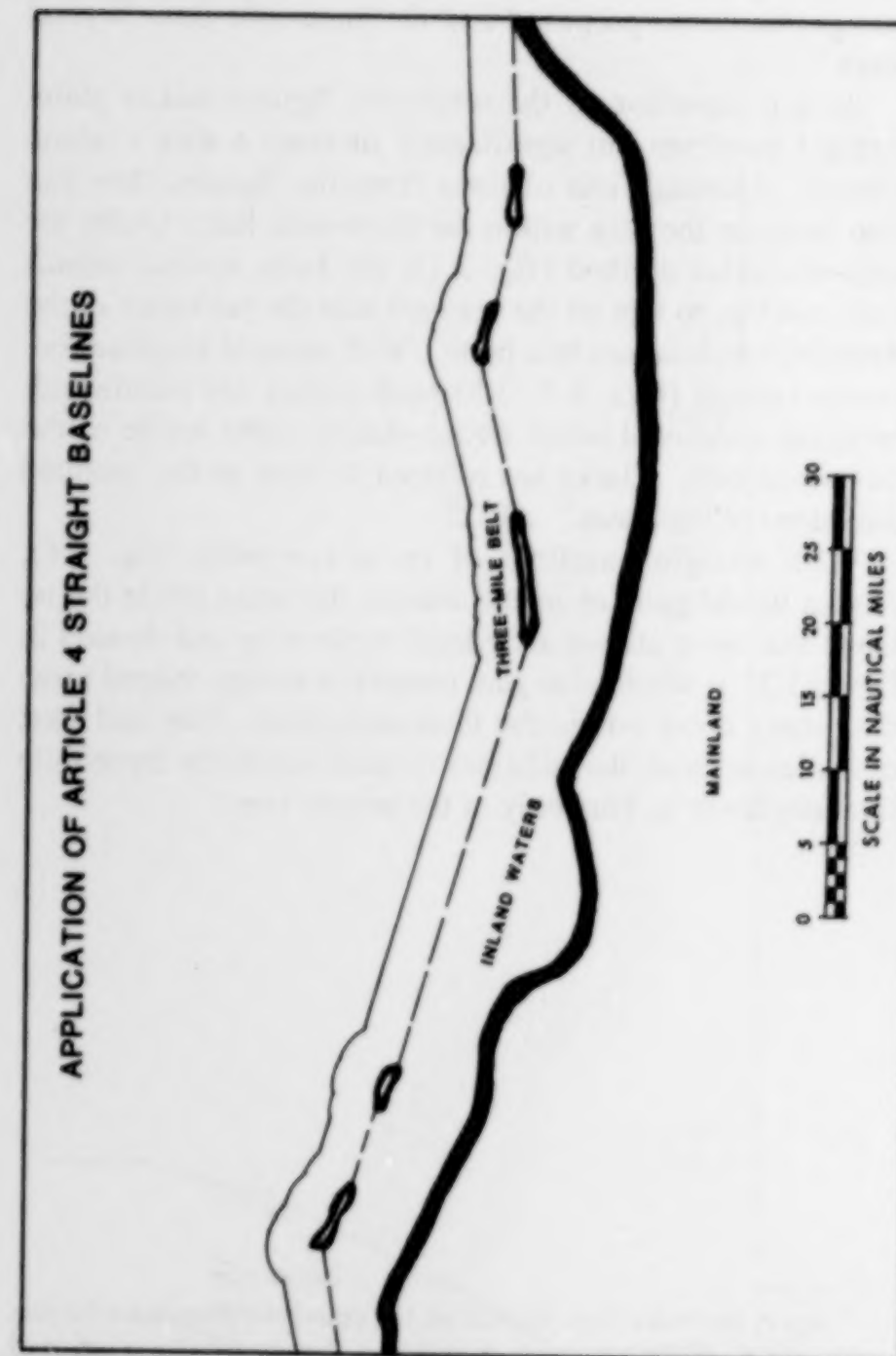


Figure 3.3. Article 4 straight baselines. The baselines shown are not limited by the distance between islands. For the effect of limiting Article 4 baselines to ten miles, as Alaska proposes, see figure 3.5.

straight baselines proposed and the three-mile limit beyond them.⁷

As a comparison of the schematic figures makes plain, straight baselines can significantly increase a state's inland waters. Although less obvious from the figures, they can also increase the area within the three-mile belt. Under the arcs-of-circles method (fig. 3.1), the belts around islands may overlap, so that on the seaward side the perimeter of the three-mile belt comes to a point. With straight baselines between islands (figs. 3.3, 3.5) such points are eliminated, bringing additional small wedge-shaped areas inside of the three-mile belt. Alaska has referred to these as the "pointed intrusions of high seas." AB 27.

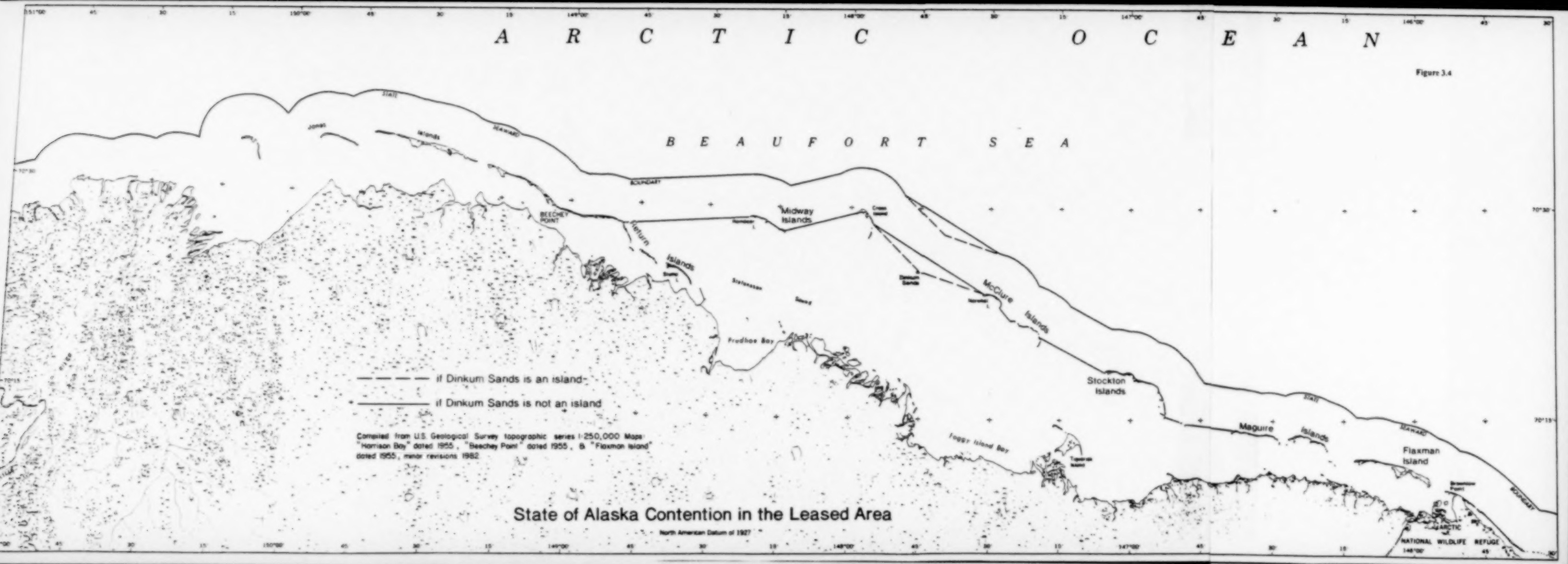
With straight baselines of up to ten miles (fig. 3.4), Alaska would gain, as inland waters, the areas inside the islands that were shown as federal enclaves or cul-de-sacs in figure 3.2. It would also gain numerous wedge-shaped areas that newly come within the three-mile limit. East and west of the leased area, the additions to lands inside the three-mile limit are fewer and are only of the second type.

⁷ Again the exact lines depend on the outcome of question 5. See *supra* note 6. If Dinkum Sands is an island, then straight lines join it to its neighbors on each side. Otherwise, one longer line (about 9.2 nautical miles) joins the neighbors directly. See AB 29.

A R C T I C O C E A N

Figure 3.4

B E A U F O R T S E A



2. Questions 3 and 13: the ten-mile rule

The previous questions, questions 2 and 12, asked whether the extent of Alaska's offshore submerged lands should be delimited by Article 4 straight baselines up to ten miles long. Questions 3 and 13 assume that Article 4 baselines are not to be used. They ask whether the submerged lands between the shore and the barrier islands are inland waters even without Article 4:

Question 3: Do the submerged lands between the mainland and the barrier islands in the leased area (including areas more than three miles from any upland) belong to Alaska on the ground that they underlie inland waters?

Question 13: Should the extent of Alaska's offshore submerged lands between Icy Cape and the Canadian border, not included within the "leased area," be determined on the basis that the waters between the mainland and the barrier islands are inland waters, even if the "straight baseline" contention is not accepted?

Associated with questions 3 and 13 is a method for delimiting inland waters behind fringing islands known as the ten-mile rule. The Court found in 1985 that such a rule has indeed been the policy of the United States:

Prior to its ratification of the Convention on March 24, 1961, the United States had adopted a policy of enclosing as inland waters those areas between the mainland and off-lying islands that were so closely grouped that no entrance exceeded 10 geographical miles. This 10-mile rule represented the publicly stated policy of the United States at least since the time of the Alaska Boundary Arbitration in 1903.

United States v. Louisiana (Alabama and Mississippi Boundary Case), 470 U.S. 93, 106-07 (1985) (opinion by Blackmun, J.). In making this finding, the Court drew on the find-

ings of its Special Master. *United States v. Louisiana (Alabama and Mississippi Boundary Case)*, Report of Special Master Walter P. Armstrong, Jr., at 5–6, 53–54 (1984) (U.S. Ex. 85-503).⁸

The parties agree that the historic policy of the United States on enclosing inland waters is a question of fact, Tr. 3522, 3565, and Alaska does not seek to invoke collateral estoppel against the United States, Tr. 3521–24 (citing *United States v. Mendoza*, 464 U.S. 154 (1984)). Accordingly, the question of the ten-mile rule—its existence, its scope, and its life-span—has been treated as open for fresh consideration in these proceedings.

Figure 3.5 illustrates the ten-mile rule along the same fictitious coastline as the other figures. The lines shown differ from the Article 4 straight baselines of figure 3.3 only because of the length limitation. Along Alaska's north coast, where none of the islands are as much as ten miles apart, this difference does not exist. See Tr. 2925; AB 29; ARB 13 n.3. Hence figure 3.4 serves again to show the actual lines proposed.

3. Question 4: assimilation and simplification

Should Alaska prevail on question 2 or question 3, the disputed parts of the leased area become inland waters and belong to the State. Question 4 becomes significant if the United States prevails on both questions 2 and 3. It asks whether the disputed areas belong to Alaska even if the waters are not inland:

Question 4: If they do not underlie inland waters of Alaska, do the submerged lands between the mainland and the barrier islands in the leased area which are more

⁸ Reprinted in *The Reports of the Special Masters of the United States Supreme Court in the Submerged Lands Cases, 1949–1987* (Michael W. Reed, G. Thomas Koester, & John Briscoe eds., 1991), at 349.

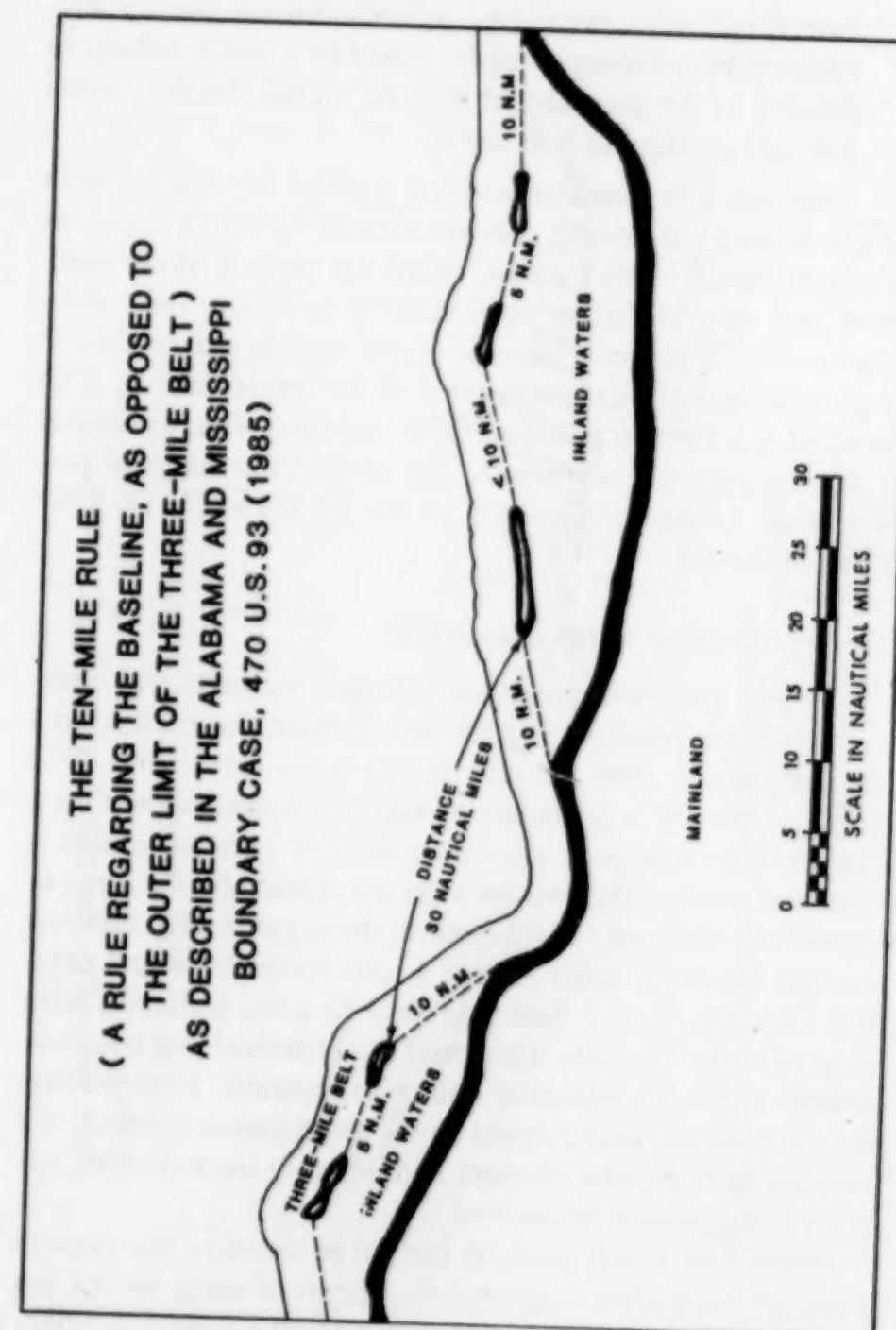


Figure 3.5. The ten-mile rule.

than three miles from any upland, but are totally surrounded by submerged lands owned by Alaska, belong to Alaska on the ground that they lie within Alaska's most seaward contiguous boundary?

Question 4 is based on another method for dealing with enclaves and cul-de-sacs that are created by the presence of coastal islands. This method, called the method of assimilation and simplification, is illustrated in figure 3.6. Here enclaves of high seas, and optionally certain cul-de-sacs of high seas as well, are assimilated to the territorial sea. The method was first proposed in 1930, and the parties agree that for some period it represented the official international policy of the United States. AB 53-54; USB 26-27; Tr. 3567 (United States).

C. Organization of the discussion

Despite the correspondence between methods and questions, it is not practical to treat each delimitation method as a separate topic. They are interrelated in too many ways. For example, Article 4 contains one version of straight baselines; the ten-mile rule may constitute another version; and it is disputed whether the two versions are essentially the same or essentially different. Furthermore, the argument for drawing straight baselines under Article 4 rests on the historical practice that the United States is said to have followed with respect to the ten-mile rule. And the historical practice with respect to the ten-mile rule cannot be separated from the historical practice with respect to the assimilation method: the two methods provide distinct and possibly incompatible approaches to similar situations.

Therefore, I will proceed instead in terms of the various theories Alaska has suggested in support of using one or another of the methods. In the next section I consider certain points of statutory interpretation relating to the Alaska

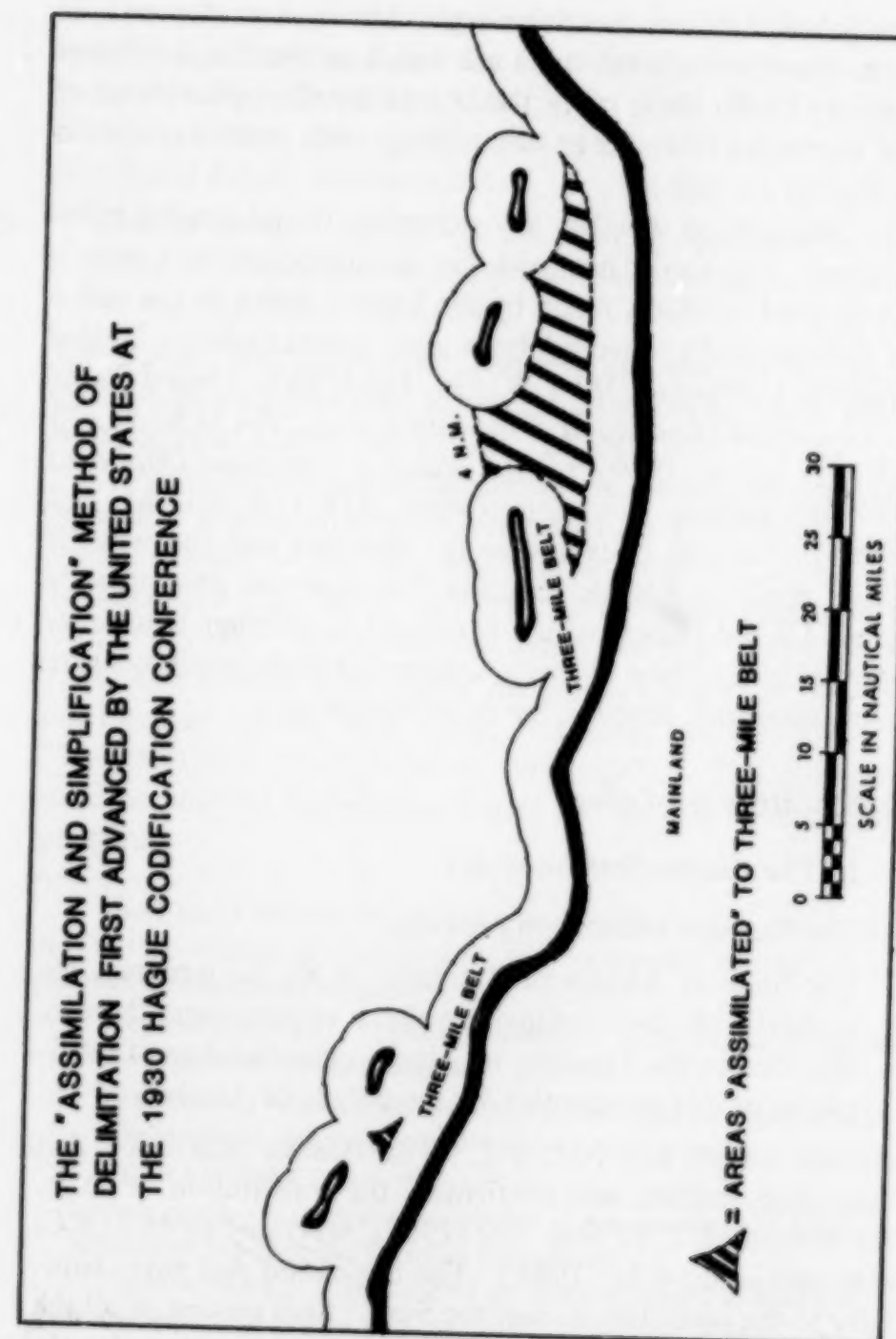


Figure 3.6. The method of assimilation and simplification.

Statehood Act and the Submerged Lands Act. I conclude there that the general rules are much as the United States claims. Under these rules, the normal baseline provisions of the Convention would be controlling, with results as shown in figures 3.1 and 3.2.

I then turn to whether any exception to the general rules applies. The Court has said that a contraction of a state's recognized territory, made by the United States in the name of foreign policy, would be highly questionable. *United States v. California*, 381 U.S. 139, 168 (1965); *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 73 n.97, 77 n.104 (1969); *United States v. Louisiana (Alabama and Mississippi Boundary Case)*, 470 U.S. 93, 111-12 (1985). Section E examines the doctrine and the ways it might apply to Alaska. Section F reviews the past practice of the United States, which is critical to whether a contraction has taken place. Finally section G recommends answers to the questions posed in the Joint Statement.

D. Statutory provisions

1. *The Alaska Statehood Act*

The Alaska Constitution provides:

The State of Alaska shall consist of all the territory, together with the territorial waters appurtenant thereto, included in the Territory of Alaska upon the date of ratification of this constitution by the people of Alaska.

Alaska Const. art. XII, § 1. The Alaska Statehood Act "accepted, ratified, and confirmed" the constitution. Pub. L. No. 85-508, § 1, 72 Stat. 339 (1958), *reprinted in* 48 U.S.C. note preceding § 21 (1988). The Statehood Act says, similarly to the constitution, that the State "shall consist of all the territory, together with the territorial waters appurtenant thereto, now included in the Territory of Alaska." *Id.*, § 2.

The parties agree that the description of the State's territory in the Statehood Act does not itself convey any submerged lands. Tr. 3510 (Alaska); Tr. 3542, 3545 (United States). Rather, submerged lands were provided for in the Statehood Act by section 6(m):

The Submerged Lands Act . . . shall be applicable to the State of Alaska and the State shall have the same rights as do existing States thereunder.

The parties also agree that Congress intended, in this submerged lands provision, to treat Alaska on an equal basis with the other states. AB 11, 70, 123-24; USB 7, 68-69.

On these agreed points the parties are clearly correct. See generally *Alaska Statehood: Hearings on S. 50 Before the Senate Comm. on Interior and Insular Affairs*, 83rd Cong., 2d Sess. 219-26, 280-82 (1954) ("1954 Senate Hearings"); *Hawaii-Alaska Statehood: Hearings on H.R. 2535, H.R. 2536, and Related Bills Before the House Comm. on Interior and Insular Affairs*, 84th Cong., 1st Sess. 114-19, 246-50, 270-76 (1955) ("1955 House Hearings").⁹ The question remains how the Submerged Lands Act applies to Alaska in practice.

⁹ Members of the Senate committee took special care to distinguish between the location of the boundary and the question of title to submerged lands inside the boundary:

Senator CORDON. . . . Senator Daniel, . . . [t]he second paragraph of the suggested substitute language . . . reads:

The State of Alaska shall consist of all the territory, together with the territorial waters appurtenant thereto, now included in the Territory of Alaska.

In your opinion, will that language give to the new State of Alaska a political or State boundary 3 miles from shore?

Senator DANIEL. It would give the State of Alaska at least that, I would say.

. . . .

Senator DANIEL. Your question related strictly to the boundaries

2. *The Submerged Lands Act*

The Submerged Lands Act provides that the states are entitled to "the lands beneath navigable waters within the boundaries of the respective States." § 3(a), 43 U.S.C. § 1311(a). The Act defines "lands beneath navigable waters" to include

all lands permanently or periodically covered by tidal waters up to but not above the line of mean high tide and seaward to a line three geographical miles distant from the coast line of each such State and to the boundary line of each such State where in any case such boundary as it existed at the time such State became a member of the Union, or as heretofore approved by Congress, extends seaward (or into the Gulf of Mexico) beyond three geographical miles

§ 2(a)(2), 43 U.S.C. § 1301(a)(2). By going up to the line of mean high tide, this section includes the tidelands. By going seaward three miles from the coastline, it includes the traditional belt of territorial sea. By going beyond the three-mile belt to a state's boundary when it entered the Union, it also appears to grant to the states certain areas that the United States has considered high seas.

Somewhat redundantly, the Act also defines the word "boundaries" to include "the seaward boundaries of a State . . . as they existed at the time such State became a member

of the new State, did it not, Senator?

Senator CORDON. Yes, the boundary line.

Senator DANIEL. You are not asking about title to the submerged lands?

Senator CORDON. No. That we will have to take care of as we did in Hawaii, with a special provision making the provisions of the Submerged Lands Act applicable. I am now simply talking about the boundaries of the State.

1954 Senate Hearings at 280.

of the Union" § 2(b), 43 U.S.C. § 1301(b). Both definitions are limited by the following language:

but in no event shall the term "boundaries" or the term "lands beneath navigable waters" be interpreted as extending from the coast line more than three geographical miles into the Atlantic Ocean or the Pacific Ocean, or more than three marine leagues into the Gulf of Mexico

§ 2(b), 43 U.S.C. § 1301(b).

The Court has stated that the Act

makes two entirely separate types of grants of submerged lands to the States. The first is an *unconditional* grant allowing each coastal State to claim a seaward boundary out to a line three geographical miles distant from its "coast line." The second is a grant *conditioned* upon a State's prior history.

United States v. Louisiana, 389 U.S. 155, 156 (1967) (concerning the effect of artificial jetties off the Gulf Coast of Texas).

Alaska's claims under the Submerged Lands Act are framed in terms of this distinction between a conditional grant (out to the state's historic seaward boundaries) and an unconditional grant (out to three miles). AB 116, 128, 131; Tr. 3486-87. Alaska has said that its contentions regarding the ten-mile rule (questions 3 and 13) and the assimilation method (question 4) are directed only to the conditional grant. AB 2-3.

a. *The conditional grant*

Alaska argues that Congress, in writing the Statehood Act, gave careful consideration to its seaward boundaries, that it defined the boundaries in terms of the territorial sea then claimed by the United States, and that it was aware of

the relationship to the Submerged Lands Act in making this definition. Thus Alaska says, "Congress intended Alaska's Submerged Lands Act grant to be co-extensive with the territorial sea claimed by the United States at the time of Alaska's admission." AB 119.

These points are basically correct. See 1954 Senate Hearings, *supra* page 35; 1955 House Hearings, *supra* page 35. However, Congress did not lay down a line marking Alaska's seaward boundary or the outer limit of the territorial sea. It clearly understood that the territorial sea was measured outward from the coastline. See, e.g., 1955 House Hearings, *supra*, at 247-48, 272-73 (remarks of committee chairman Engle). And since the width of the territorial sea was three miles, the language of the Submerged Lands Act defining Alaska's entitlement would have been (at least primarily) the language italicized:

all lands permanently or periodically covered by tidal waters up to but not above the line of mean high tide and seaward to a line three geographical miles distant from the coast line of each such State and to the boundary line of each such State where in any case such boundary as it existed at the time such State became a member of the Union, or as heretofore approved by Congress, extends seaward (or into the Gulf of Mexico) beyond three geographical miles

§ 2(a)(2), 43 U.S.C. § 1301(a)(2) (emphasis added).¹⁰ Accordingly, the central question is the location of Alaska's coastline.

¹⁰ Under one of Alaska's suggested delimitation methods, the assimilation method, the territorial sea could in some places be more than three miles from any point on the baseline. See figure 3.6. Only if that method was used would the later language of the section, referring to a boundary extending "seaward . . . beyond three geographical miles," come into play. In that case, there would be a further question whether section 2(b)

b. *The definition of "coast line"*

The Submerged Lands Act defines the coastline as follows:

The term "coast line" means the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters

§ 2(c), 43 U.S.C. § 1301(c).

Alaska's next contentions go to the application of this definition where the mainland is fringed by near-shore, closely spaced barrier islands. Alaska says that the coastline in that case is formed in part by lines joining the barrier islands. The United States says that the coastline consists of the line of ordinary low water along the mainland and around each island individually. For this result it relies on the 1965 *California* case, which held that the meaning of "inland waters" in the Submerged Lands Act should conform to the 1958 Convention, and on subsequent decisions of the Court. Alaska makes two replies, as follows.

(1) *The Douglas amendment*

First, Alaska argues that Congress rejected the United States' interpretation of "coast line" at the time it passed the Submerged Lands Act. It points to the Senate floor debate. Senator Paul Douglas of Illinois offered an amendment that would have defined "coast line" in just the way the United States now argues for:

The term "coast line" means the line of ordinary low water along that portion of the coast of the main continent

of the Act, quoted *supra* page 37, should be read as limiting grants into the Arctic Ocean in the same way as grants into the Atlantic and Pacific.

The status of the assimilation method is discussed in sections F(3)(b) and F(5)(d)(2), below.

which is in direct contact with the open sea and the line marking the seaward limit of inland waters, and in the case of any island seaward of such coast, means the line of ordinary low water around such island.

99 Cong. Rec. 4240 (1953).¹¹ The purpose, Senator Douglas indicated, was to foreclose expansive state claims where there were "remote islands" lying off the coast, as in California. Senator Long of Louisiana objected that the amendment would cover all offshore islands, even nearby ones such as the Chandeleur Islands fringing the Louisiana coast, where it was generally agreed that the intervening waters were inland waters. The amendment was defeated. 99 Cong. Rec. 4240-43 (1953).

Alaska concludes that to apply the normal baseline provisions of the Convention to near-shore island fringes is contrary to the intent of Congress. It suggests that the Court's 1965 decision in *United States v. California* pertained only to remote islands like those off the California coast.

I agree with the United States that Alaska's argument comes too late. In *California* the Court found, after a thorough review of just this history, that Congress had no intent as to the definition of inland waters but meant to leave its interpretation to the courts. It read the rejection of the Douglas amendment as merely rejecting the idea that Congress should adopt its own definition. 381 U.S. at 150-60. After the *California* decision adopted the Convention's definition for purposes of the Submerged Lands Act, 381 U.S. at 161-67, the Court went on in the *Louisiana Boundary Case* to apply that same definition to near-shore island fringes.¹²

¹¹ For the committee version of the definition, which Senator Douglas sought to amend, see S. Rep. No. 133, 83d Cong., 1st Sess. 2 (1953). The committee version was the same as that ultimately enacted.

¹² Except, as Alaska emphasizes, for Chandeleur and Breton Sounds, which the United States had conceded to belong to Louisiana and for a

United States v. Louisiana (Louisiana Boundary Case), 394 U.S. 11, 66-73 (1969); *id.*, Report of Special Master Walter P. Armstrong, Jr., at 49-52 (1974) (U.S. Ex. 85-415), *reprinted in* Reed et al., *supra* note 8, at 181, and in 59 I.L.R. 249 (ruling that Caillou Bay was not inland water); *id.*, 420 U.S. 529 (1975) (accepting the Master's report).

(2) *The meaning of "open sea"*

Second, Alaska argues that the definition of "coast line" in the Submerged Lands Act has two parts. The coastline consists of (1) "the line of ordinary low water along that portion of the coast which is in direct contact with the open sea" and (2) "the line marking the seaward limit of inland waters." § 2(c), 43 U.S.C. § 1301(c). The Court has ruled on the part concerning inland waters, Alaska says, but it has not determined what Congress meant by the other part of the definition, "the line of ordinary low water along that portion of the coast which is in direct contact with the open sea."

Furthermore, Alaska argues, Congress intended the phrase "in direct contact with the open sea" to include only the seaward side of near-shore barrier islands. It relies particularly on remarks of Senator Holland, in opposition to the Douglas amendment (*supra* page 39), that "the coastline of Louisiana was along the outer line of the great bow of islands which comprise the Chandeleur Islands" and that under the committee's bill "there would be no question about the outer rim of the Chandeleur Islands being that portion of the coast which is in contact with the open sea." 99 Cong. Rec. 4242 (1953). Alaska would draw its own coastline similarly, along the outer rim of its barrier islands. In addition to Senator Holland's statement, Alaska refers to (1) the ordinary meaning of "open sea," (2) contemporaneous administrative

time described as inland water. I will consider the implications of that concession later.

interpretations of the Submerged Lands Act, (3) the complementary language of the Outer Continental Shelf Lands Act, 43 U.S.C. § 1331(a) (1988), which applies to lands "lying seaward and outside of" the lands conveyed to the State under the Submerged Lands Act, and (4) the undesirability of enclaves and pockets of high seas.

On first examination Alaska's position appears plausible. I conclude, however, that Alaska's interpretation of "coast line" is inconsistent with the 1965 *California* decision. First, the Court there took "open sea" simply to mean any waters other than inland waters:

It is precisely that problem of defining what constitutes open sea and what constitutes inland waters which we must decide in the present case.

.... [T]he Convention on the Territorial Sea and the Contiguous Zone, to which we became a party in 1961, now establishes rules for separating the open sea from inland waters.

381 U.S. at 162 n.25. When it made this remark, the Court was specifically concerned with the meaning of "inland waters" in the Submerged Lands Act, *see id.* at 149, 161, and it was not considering the Act's usage of "open sea." The Court did also indicate, however, that it was adopting the Convention's definitions for all purposes concerning delimitation of the coastline. Thus it said in *California* that its action "establishes a single coastline for both the administration of the Submerged Lands Act and the conduct of our future international relations," *id.* at 165. Later the Court was even more explicit:

The decision in the second *California* case . . . held that Congress had left it up to this Court to define the "coast line" from which the standard three-mile grant was to be measured.

United States v. Louisiana, 389 U.S. 155, 158 (1967).

Second, even if one reads *California* as passing only on the definition of inland waters, Alaska's position is still inconsistent with the decision. The coastline Alaska contends for would consist not only of the low-water line along the seaward side of the barrier islands but also of straight lines connecting the islands. In Alaska's own view, the latter would become the seaward limit of inland waters. Tr. 3514. The State's position would thus create two kinds of inland waters: those that qualify as inland under the Convention (without using Article 4) and those resulting from the interpretation of "open sea" in the Submerged Lands Act. To recognize the second class as inland waters would contravene *California*'s holding that the definition of inland waters should conform to the 1958 Convention.

This conclusion is supported by the testimony of expert witnesses for both sides. Alaska's witness on the subject was Dr. J.R. Victor Prescott, a reader in geography at the University of Melbourne (since promoted to full professor). Professor Prescott testified initially that the mainland shore inside the barrier islands was not in direct contact with the open sea, Tr. 2926-27, 2931-36, 2951, but he later changed his position and said that a coast facing the open sea is one that does not face inland waters. Tr. 2953, 2975-79, 2985-87. Dr. Robert Smith, Chief of the International Boundary and Resource Division in the Office of the Geographer, Department of State, testified for the United States in support of the latter position. Tr. 3202, 3276-79.

Alaska suggests that its reading of "open sea" can be reconciled with *California* by considering the lines joining the islands to be straight baselines, which Article 4 of the Convention authorizes. Tr. 3525. The conditions for using straight baselines, however, are severely limited, as I shall discuss in the next section, and in any case they are independent of the meaning of "coast line" in the Submerged Lands

Act. I conclude that the "open sea" argument adds no extra weight to Alaska's case.

E. The impermissible contraction theory

According to the analysis so far, Alaska's grant under the Submerged Lands Act is measured outward from its coastline; the coastline depends on the seaward limit of inland waters; and inland waters are to be defined according to the Convention.

Under the Convention, waters can qualify as inland waters in three ways: (1) they are landward of the normal baseline or of the closing line across a bay, river, or harbor; (2) the method of straight baselines is used, and they are landward of a straight baseline; or (3) they qualify as a historic bay.

The United States' position, as already described, calls for use of the first method. In general the normal baseline is the low-water line (Article 3), with special provisions for bays (Article 7), harbor works (Article 8), and rivers (Article 13), but not for fringing islands. *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 66-73 (1969).

Alaska argues for applying the Convention's second ground for inland waters, straight baselines, but not for the third ground, historic bays.¹³ Alaska also offers another the-

¹³ By Article 7(6) of the Convention, "so-called 'historic' bays" are exempted from the usual rules for bays (Art. 7(1)-7(5)). The Court has applied the doctrine of historic bays (or, more generally, of historic inland waters) to one fringing island situation, namely Mississippi Sound. *United States v. Louisiana (Alabama and Mississippi Boundary Case)*, 470 U.S. 93 (1985). The Court found there that "the United States has effectively exercised sovereignty over Mississippi Sound as inland waters from the time of the Louisiana Purchase in 1803 until 1971, and has done so without protest by foreign nations." 470 U.S. at 102.

The evidentiary requirements for historic inland waters are stringent, as the quotation just given indicates. Alaska does not claim to be able to

ory that is independent of the Convention, which may be called the "inland waters at statehood" argument. In this section I examine the legal bases of these arguments; in section F, I examine the underlying facts.

1. Article 4 straight baselines

Straight baselines under Article 4 of the Convention are the first of Alaska's proposed methods for determining the State's rights in submerged lands. See *supra* section B(1) and figures 3.3, 3.4, and 3.5.

The parties agree that the north coast of Alaska meets the geographical conditions for straight baselines, as described in Article 4(1), *supra* page 26. Alaska's witness, Dr. Prescott, drew such lines, and the United States agreed that, if Article 4 baselines were to be used at all, Dr. Prescott's lines were in general appropriate. See Tr. 2893-2920, 2921-24; Ak. Exs. 85-920A through 85-920T; AB 22-31.

The parties also agree, however, that the Convention makes the use of straight baselines permissive, not mandatory. Within the United States, the decision whether to use straight baselines is normally one for the Federal Government, not the states. *United States v. California*, 381 U.S. 139, 167-69 (1965); *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 72-73 (1969); *United States v. Louisiana (Alabama and Mississippi Boundary Case)*, 470 U.S. 93, 99 (1985); *United States v. Maine*, 475 U.S. 89, 94 n.9 (1986). The United States has chosen not to draw straight baselines under Article 4. Joint Statement 7. The

satisfy them for the lands along its north coast. Cf. *United States v. Alaska*, 422 U.S. 184 (1975) (holding evidence insufficient to show Cook Inlet a historic bay). Alaska does rely, however, on some of the same evidence as for Mississippi Sound about the general practice of the United States in claiming inland waters.

general rule would thus foreclose Alaska's claim to Article 4 baselines.

The cases have left room, however, for a possible exception to the general rule. In the 1965 *California* case, California argued that, if its inland waters were to be determined according to the Convention, they should be determined using Article 4. The Court, rejecting this argument, said that the State could not use Article 4 baselines to *extend* our international boundaries, beyond their traditional limits, against the expressed opposition of the United States:

We agree with the United States that the Convention recognizes the validity of straight base lines used by other countries, Norway for instance, and would *permit* the United States to use such base lines if it chose, but that California may not use such base lines to extend our international boundaries beyond their traditional international limits against the expressed opposition of the United States. . . . [A]n extension of state sovereignty to an international area by claiming it as inland water would necessarily also extend national sovereignty, and unless the Federal Government's responsibility for questions of external sovereignty is hollow, it must have the power to prevent States from so enlarging themselves. We conclude that the choice under the Convention to use the straight-base-line method for determining inland waters claimed against other nations is one that rests with the Federal Government, and not with the individual States.

381 U.S. at 167-68. At the same time, the Court remarked that a *contraction* of a State's recognized territory by the United States in the name of foreign policy would be highly questionable:

The national responsibility for conducting our international relations obviously must be accommodated with the legitimate interests of the States in the territory over

which they are sovereign. Thus a contraction of a State's recognized territory imposed by the Federal Government in the name of foreign policy would be highly questionable.

Id. at 168. To evaluate Alaska's argument, it thus becomes relevant to determine whether the use of straight baselines off Alaska's north coast would be an extension (or the failure to use them a contraction) compared to former practice.

In the *Louisiana Boundary Case*, 394 U.S. 11 (1969), Louisiana wanted to use Article 4 baselines connecting the mainland and fringes or chains of islands along the coast. *Id.* at 66-67. The Court held to its position in *California*. 394 U.S. at 72-73. It added that, if the United States refused to *extend* its coastline, it would not matter that the motivation was partially domestic:

While we agree that the straight baseline method was designed for precisely such coasts as the Mississippi River Delta area, we adhere to the position that the selection of this optional method of establishing boundaries should be left to the branches of Government responsible for the formulation and implementation of foreign policy. It would be inappropriate for this Court to review or overturn the considered decision of the United States, albeit partially motivated by a domestic concern, not to extend its borders to the furthest extent consonant with international law.

Id. But, the Court said, if the United States had *contracted* its territory from a position that had been its "consistent official international stance . . . , it arguably could not abandon that stance solely to gain advantage" over Louisiana. *Id.* at 74 n.97. Louisiana was to be permitted to argue before the Special Master that the United States "had actually drawn its international boundaries in accordance with the principles and methods embodied in Article 4" in the past:

Louisiana further contends that the United States is estopped from denying the "inland water" status of such areas by its concession in earlier stages of this litigation that the areas between the mainland and all the offshore islands were inland waters. . . .

It might be argued that the United States' concession reflected its firm and continuing international policy to enclose inland waters within island fringes. It is not contended at this time, however, that the United States has taken that posture in its international relations to such an extent that it could be said to have, in effect, utilized the straight baseline approach sanctioned by Article 4 of the Convention. If that had been the consistent official international stance of the Government, it arguably could not abandon that stance solely to gain advantage in a lawsuit to the detriment of Louisiana. Cf. *United States v. California*, 381 U.S. 139, 168: "[A] contraction of a State's recognized territory imposed by the Federal Government in the name of foreign policy would be highly questionable." We do not intend to preclude Louisiana from arguing before the Special Master that, until this stage of the lawsuit, the United States had actually drawn its international boundaries in accordance with the principles and methods embodied in Article 4 of the Convention on the Territorial Sea and the Contiguous Zone.

Id. at 73 n.97 (1969).¹⁴

The parties have disputed exactly what showings would

¹⁴ In the *Louisiana Boundary Case*, the Master later found that the United States had not used straight baselines. *United States v. Louisiana (Louisiana Boundary Case)*, Report of Special Master Walter P. Armstrong, Jr. (1974) (U.S. Ex. 85-415), reprinted in Reed et al., *supra* note 8, at 181, and in 59 I.L.R. 249. The Court accepted the Master's report. 420 U.S. 529 (1975).

have to be made to bring Alaska within the dictum of the *Louisiana Boundary Case*. The most fundamental requirement, however, is clear: Alaska would be required to show that the United States' present position represents a contraction of territory, compared to its position at the relevant time or times in the past. Only if this first showing is made does it become necessary to decide what other requirements there may be.¹⁵

The next section, section F, will review the facts about whether Alaska's territory has been contracted.

2. *Inland waters at statehood*

The argument for using Article 4 straight baselines, introduced in the previous section, begins from the Court's statements in the 1965 *California* case and the *Louisiana Boundary Case*. Those statements, especially in *California*, emphasized the interests of the Federal Government and the states as sovereigns. Alaska also makes a separate argument which is independent of Article 4 and which rests on its rights of property. In the Joint Statement it formulated this second position as follows:

¹⁵ Other requirements that have been suggested or at least touched upon include the following:

1. That the United States must have followed "the principles and methods embodied in Article 4" quite literally, including even the publication of charts showing straight baselines in accordance with Article 4(6). USB 18, 42-44. *But see* Tr. 3558-59 (United States). For Alaska's views see AB 15, 107, 150-51; ARB 51-52 & app. A at 35-36; Tr. 3579-81.

2. That the United States must have contracted its territory "solely to gain advantage in a lawsuit to the detriment of" Alaska. USB 57-63. *But see* Tr. 3527 (Alaska), 3562 (United States) (agreeing for different reasons that motivation is irrelevant).

3. That all the criteria for a historic bay must be met. USB 55-56; Tr. 3557-60.

The *State of Alaska* contends that the submerged lands between the mainland and the barrier islands in the leased area underlie waters which Congress considered inland waters at the time Alaska was admitted to the Union. Accordingly, Alaska submits (1) that those lands vested in Alaska at the moment of statehood under the *Pollard* rule . . . and cannot be divested by any subsequent change of law; and (2) that the same result obtains under the Submerged Lands Act.

Joint Statement 9-10. See also Tr. 3528-29, 3585-86; ARB 39-45.

The argument has two strands, one based on the *Pollard* rule and the other on the Submerged Lands Act. In the second strand, the claim is that the Submerged Lands Act grant to Alaska took effect in January 1959 and so that Alaska's rights must be determined as of that date. This claim cannot be sustained. The same reasoning would lead one to say that, because the Submerged Lands Act took effect for the first forty-eight states in 1953, the rights of those states must be determined as of 1953. But the United States took that position in the 1965 *California* case, and the Court rejected it. 381 U.S. at 164-65. Nor did Congress impose a special reading on the Submerged Lands Act as applied to Alaska. On the contrary, the Congress that enacted the Alaska Statehood Act intended that Alaska be treated under the Submerged Lands Act like the other states. See *supra* section D(1).

The other part of Alaska's argument is based on the *Pollard* doctrine, which says that new states, upon admission to the Union, take title to the beds of inland navigable waters within their boundaries. Alaska says the disputed areas were considered inland waters at statehood by virtue of the ten-mile rule—the second of its proposed delimitation methods. Therefore, Alaska concludes, actions purporting to divest it of these areas would be an impermissible contraction of its

territory under the 1965 *California* and *Louisiana Boundary* cases.

The United States responds that the ten-mile rule was "not an unqualified principle and most likely would not serve to enclose the waters shoreward of the barrier islands off the North Slope of Alaska." USB 6. Further, it says that the rule was not its policy at Alaska's statehood in January 1959: "[T]he federal evidence indicates that the United States ceased following the so-called ten-mile rule for international purposes as soon as the Convention had been signed in 1958." USB 8-9. See also USB 18-42 (giving the United States' version of the policy over the years); USB 53-54 (on the qualifications to the rule); USRB 9 n.3, 13-14 (also on the qualifications). Finally, the United States argues that whatever the policy at statehood in 1959, the doctrine of *Pollard v. Hagan* does not freeze the definition of inland waters as of that date.

I turn to the evaluation of these arguments in section F.

3. General remarks

Alaska points out that it is not attempting to show that the waters inside barrier islands qualify as historic bays under Article 7(6) of the Convention. Rather, it seeks to show that these waters were inland by virtue of a general delimitation system that the United States employed at the times significant to the development of Alaska's rights. AB 124-25; Tr. 3531-32. Either because the system amounted to a long-standing use of straight baselines, or because the system made the waters inland at the moment of statehood, a later move to the normal baseline provisions of the Convention creates, in Alaska's view, an impermissible contraction of its territory.

If this were a historic bay case, the burden would be on Alaska to show, *inter alia*, a long-continued exercise of governmental authority over the disputed areas as inland waters.

See *United States v. California*, 381 U.S. 139, 172-75 (1965); *Louisiana Boundary Case*, 394 U.S. 11, 74-78 (1969); *United States v. Alaska*, 422 U.S. 184 (1975); *Alabama and Mississippi Boundary Case*, 470 U.S. 93 (1985). I assume *arguendo* that something less than the disclaimer of a historic bay might amount to an impermissible contraction of a state's territory.¹⁶ To relax the requirements, however, is not to shift the burden of proof. Alaska must at least show that the disputed areas were once part of its territory. Where no particularized claim to these areas has been made, it would require a rather well-established and well-defined rule for inland water delimitation to imply such a claim. For such a rule, Alaska relies on the *Alabama and Mississippi Boundary Case*.

F. Past delimitation practice of the United States

The past practice of the United States in delimiting its inland waters and territorial sea bears on two related but distinguishable questions, raised in sections E(1) and E(2):

1. Has there been a contraction of Alaska's recognized territory within the meaning of the *California* and *Louisiana Boundary* cases?
2. Were the disputed areas considered inland waters at Alaska's statehood?

In addition, a review of the practice will lead to a conclusion about Alaska's final theory, which is based on the assimilation of certain waters to the territorial sea.

1. *The Alabama and Mississippi Boundary Case*

As noted in section B(2), the Court has already made a finding as to the delimitation practice of the United States in 1959. The context of that finding was a controversy over the status of Mississippi Sound. The Court said:

¹⁶ The United States suggests the contrary. See *supra* note 15.

Prior to its ratification of the Convention on March 24, 1961, the United States had adopted a policy of enclosing as inland waters those areas between the mainland and off-lying islands that were so closely grouped that no entrance exceeded 10 geographical miles. This 10-mile rule represented the publicly stated policy of the United States at least since the time of the *Alaska Boundary Arbitration* in 1903. There is no doubt that foreign nations were aware that the United States had adopted this policy. Indeed, the United States' policy was cited and discussed at length by both the United Kingdom and Norway in the celebrated *Fisheries Case (U.K. v. Nor.)*, 1951 I.C.J. 116. Nor is there any doubt, under the stipulations of the parties in this case, that Mississippi Sound constitutes inland waters under that view.

United States v. Louisiana (Alabama and Mississippi Boundary Case), 470 U.S. 93, 106-07 (1985) (footnotes omitted). In a footnote the Court added:

The United States confirmed this policy in a number of official communications during the period from 1951 to 1961. See Report of Special Master 48-54. Also, the United States followed this policy in drawing the Chapman line along the Louisiana coast following the decision in *United States v. Louisiana*, 339 U.S. 699 (1950). See Shalowitz, at 161. In a letter to Governor Wright of Mississippi, written on October 17, 1951, Oscar L. Chapman, then Secretary of the Interior, indicated that if the Chapman line were extended eastward beyond the Louisiana border, it would enclose Mississippi Sound as inland waters.

470 U.S. at 106 n.9.

The parties agree that the Court's finding in the *Alabama and Mississippi Boundary Case* was one of fact, and Alaska does not seek to invoke collateral estoppel against the United

States. Rather, Alaska has introduced evidence aimed at proving the ten-mile rule independently—including, among many other documents, those referred to in the Court's footnote and in the Master's report there cited. The United States contests Alaska's interpretation of the evidence. It says that the Court's statement of the ten-mile rule was overly broad and was not necessary to the decision.

I agree with the United States that the ten-mile rule was not strictly necessary to the decision. It was one element among others contributing to a finding that Mississippi Sound was a historic bay. See *supra* page 44 n.13.

As to the scope of the rule, the United States explains that the matter was not fully briefed. Tr. 3567. The explanation seems correct. In his report (*supra* page 30), Special Master Armstrong quoted numerous statements of the pre-Convention policy for delimiting inland waters, *id.* at 39–42, 48–53, and he concluded:

On March 24, 1961 the United States ratified the Geneva Convention, which, as noted in *United States v. California*, *supra*, represented a departure from its previously held position; therefore the material quoted above represents the publicly stated position of the United States from 1903 (*Alaskan Boundary Arbitration*) to that date. Under that position, there is no doubt that Mississippi Sound constituted inland waters, as none of its mouths exceeds ten miles in width.

Id. at 53–54. There is considerable variation among the statements the Master quoted in support of this conclusion, but as I read the report, he did not select any particular statement of policy as being more accurate or more authoritative than the others. Rather, the selection was ascribed to him by Mississippi in its reply brief to the Court:

Neither does the United States take issue with the Master's finding that the United States prior to the effective

date (September 10, 1964) of the Convention on the Territorial Sea had adopted a policy of enclosing as internal waters those areas between the mainland and offlying islands which were so closely grouped that no entrance exceeded ten (10) nautical miles in width. (Report, pp. 41–44 and 48–54).

Reply Brief for the State of Mississippi at 26–27, *Alabama and Mississippi Boundary Case*, 470 U.S. 93 (1985) (footnote omitted). At oral argument, counsel for Alabama described the policy somewhat differently:

[T]he ten-mile rule . . . is basically a rule that inland waters of the United States which are straits or sound[s] which lead to other bodies of inland water, which are no more than ten miles wide, should be dealt with and enclosed as inland water.

Transcript of oral argument, *Alabama and Mississippi Boundary Case* (Ak. Ex. 85-231a), at 37. The Court's opinion then stated the rule in the language Mississippi had used, with a correction in the duration to accord with the Master's finding. 470 U.S. at 106–07.

Given this history, I do not believe that the Court in the *Alabama and Mississippi Boundary Case* intended to pass upon what statement of the rule most accurately reflected United States policy regarding near-shore islands. For Mississippi Sound, the differences among statements apparently made no difference in result. For the northern coast of Alaska, that may not be the case. Moreover, as the differing descriptions just referred to suggest, the exact nature of the United States' historic practice is a matter of some intricacy. Because of the Court's statement in the *Alabama and Mississippi Boundary Case*, I have included in this report a more detailed examination of the practice than might otherwise have seemed necessary.

2. *United States policy to 1929*

In the 1947 *California* case the Court found that, shortly after we became a nation, our statesmen took actions that led to acquisition by the Federal Government of a three-mile belt of marginal sea:

From all the wealth of material supplied, . . . we cannot say that the thirteen original colonies separately acquired ownership to the three-mile belt or the soil under it, even if they did acquire elements of the sovereignty of the English Crown by their revolution against it.

At the time this country won its independence from England there was no settled international custom or understanding among nations that each nation owned a three-mile water belt along its borders. . . .

It did happen that shortly after we became a nation our statesmen became interested in establishing national dominion over a definite marginal zone to protect our neutrality. Largely as a result of their efforts, the idea of a definite three-mile belt in which an adjacent nation can, if it chooses, exercise broad, if not complete dominion, has apparently at last been generally accepted throughout the world That the political agencies of this nation both claim and exercise broad dominion and control over our three-mile marginal belt is now a settled fact. . . .

Not only has acquisition, as it were, of the three-mile belt been accomplished by the National Government, but protection and control of it has been and is a function of national external sovereignty.

United States v. California, 332 U.S. 19, 31-34 (1947) (citations and footnotes omitted).

The parties have traced the development of this claim to a marginal belt and, with it, the development of the doctrine of inland waters, from whose seaward limit the marginal belt begins. Rather little of the early material deals specifically

with waters behind islands. The authorities that do exist, however, provide background useful for understanding later efforts at codification.

a. *Delaware Bay*

The first relevant precedent was an opinion submitted in 1793 by Attorney General Edmund Randolph to Secretary of State Thomas Jefferson. *Seizure in Neutral Waters*, 1 Op. Att'y Gen. 32. Although the facts involved a bay rather than islands,¹⁷ the opinion quoted one passage relevant to both. The following comes from the seventeenth-century Dutch writer Hugo Grotius:

[I]t seems to appear that the property and dominion of the sea might belong to him who is in possession of the lands on both sides, though it be open above as a gulf, *or above and below as a strait*; provided it is not so great a part of the sea, that, when compared with the land on both sides, it cannot be supposed to be some part of them.

1 Op. Att'y Gen. at 36 (quoting Grotius, *Of War and Peace*, book 2, ch. 3, sec. 7) (emphasis added). The significance of this passage has recently been noted in connection with another dispute involving islands less than ten miles apart. *United States v. Maine (Massachusetts Boundary Case)*, Report of Special Master Walter E. Hoffman, at 34-36, 38,

¹⁷ Randolph held that Delaware Bay was within the territory of the United States and that the ship *Grange* had therefore been illegally seized in neutral waters.

On the basis of Attorney General Randolph's opinion, Delaware Bay has been claimed as historic inland waters of the United States and then, under the 1958 Convention, as a juridical bay less than 24 miles wide. Ak. Ex. 85-208, at 7 (attachment to letter from Edmund B. Clark, Department of Justice, to Leonard C. Meeker, Legal Adviser, Department of State (Sept. 23, 1968)); Ak. Ex. 85-215 (letter from Leonard C. Meeker to Solicitor General Erwin N. Griswold (Apr. 8, 1969)).

62-63 (Oct. Term, 1984) (U.S. Ex. 85-903), *reprinted in* Reed et al., *supra* note 8, at 703, *exception overruled*, 475 U.S. 89 (1986).¹⁸

b. Long Island Sound

Another early case, this one concerning Long Island Sound, was decided by the New York Court of Appeals in 1866. *Mahler v. Norwich & New York Transportation Co.*, 35 N.Y. 352. A fatal boating accident took place on the sound, and the plaintiff charged the transportation company with negligence. The trial court dismissed the complaint on the ground that the collision occurred outside the jurisdiction of the State of New York. The Court of Appeals, reversing, found that the place of the accident was within the state boundary. To construe the boundary statute as excluding the waters of the sound, the Court said,

would be an abandonment, by a maritime power, of jurisdiction over an inland body of water, inclosed within the

¹⁸ In the dispute before Special Master Hoffman, Massachusetts claimed Vineyard Sound and Nantucket Sound as historic inland waters under Article 7(6) of the 1958 Convention. Report at 9, 10. The Master found that both sounds were "the kinds of bodies of water which both English and American practice [during the colonial and early national periods] would have considered suitable for treatment as inland, county waters" or "waters *inter fauces terrae*." *Id.* at 37-38.

Ultimately Special Master Hoffman concluded that Massachusetts had established historic title to Vineyard Sound, Report at 61, but not to Nantucket Sound because there had been no timely actual assertion of jurisdiction, *id.* at 64-66. Regarding the effect of the ten-mile rule as found by the Court in the *Alabama and Mississippi Boundary Case*, the Master repeated that "while either the United States or Massachusetts *could* have treated Nantucket Sound as internal waters, their actions and fishing statutes, standing alone, could only serve as an exercise of jurisdiction, but fell short to show any actual intent to establish jurisdiction over Nantucket Sound." Report at 69.3 n.1.

State at each of its termini, and with no outlet to the ocean except under the command of our cannon from either shore.

....
That Long Island Sound was included within the territorial dominions of the British Empire, at the date of the charter from Charles the Second to the Duke of York, is a proposition too plain for argument. It was an inland arm of the sea, washing no shores but those of the provinces, and with no opening to the ocean, except by passing between British headlands less than five miles apart. . . . The rule is one of universal recognition, that a bay, strait, sound or arm of the sea, lying wholly within the domain of a sovereign, and admitting no ingress from the ocean, except by a channel between contiguous headlands which he can command with his cannon on either side, is the subject of territorial dominion. . . . Within this rule, the islands at the eastern extremity of Long Island Sound are the *fauces terrae*, which define the limits of territorial authority, and mark the line of separation between the open ocean and the inland sea.

Id. at 354-56 (citations omitted). Either by the charter to the Duke of York or by the revolution, the states had succeeded to the rights of the king, *id.* at 356, and New York had not relinquished these rights (so far as pertinent here) to the Federal Government, *id.* at 357. Furthermore, New York's jurisdiction over Long Island Sound was supported by long usage and had never been disputed. *Id.* at 360.

Although the *Mahler* case does not state a ten-mile rule,¹⁹ it has been cited as a principal authority for treating islands

¹⁹ The range of cannon, mentioned in the opinion, was conventionally taken to be three miles. See 1 Aaron L. Shalowitz, *Shore and Sea Boundaries* 24-26 (U.S. Dep't of Commerce Pub. 10-1, 1962).

less than ten miles apart as enclosing inland waters. 1 Shalowitz, *supra* note 19, at 108 n.7. See also *id.* at 141 n.73.²⁰

c. Cuba and the Florida keys

Another early occasion for considering the effect of islands was a dispute between the United States and Spain over the breadth and delimitation of the territorial sea off the coast of Cuba. On August 10, 1863, Secretary of State Seward wrote to Mr. Tassara, the Spanish Minister, protesting Spain's claim to a six-mile breadth but acknowledging that, along some parts of the coast, the baseline would be a line of offshore keys:

The undersigned has further ascertained, as he thinks, that the line of keys which confront other portions of the Cuban coast resemble, in dimensions, constitution and vicinity to the mainland, the keys which lie off the Southern Florida coast of the United States. The undersigned assumes that this line of keys is properly to be regarded as the exterior coast-line, and that the inland jurisdiction ceases there, while the maritime jurisdiction of Spain begins from the exterior sea front of those keys.

Ak. Ex. 85-29. As I shall describe shortly, the United States

²⁰ Long Island Sound itself is now treated (together with part of Block Island Sound) as a juridical bay under Article 7 of the Convention. *United States v. Maine (Rhode Island and New York Boundary Case)*, 469 U.S. 504 (1985). Under the Court's interpretation of the Convention, that result was made possible only by a finding that Long Island could be treated as part of the mainland. *Id.* at 514-20. Previously, Long Island Sound (but not Block Island Sound) was claimed as historic internal waters. *Id.* at 509.

Alaska has not argued that the islands off its Arctic coast could be treated as part of the mainland.

later quoted this letter as representative of its own position regarding the baseline and the treatment of islands.²¹

d. The Alaska boundary arbitration

Although the preceding materials provide some authority for treating waters inside islands as inland waters, Alaska dates the "full formulation" of a ten-mile rule for islands to the Alaska boundary arbitration of 1903. AB 48. This arbitration, conducted pursuant to treaty between the United States and Great Britain, is reported in *Proceedings of the Alaskan Boundary Tribunal*, S. Doc. No. 162, 58th Cong., 2d Sess. (1903-04) (hereafter *Proceedings*).

The general area of concern in the arbitration was the Alaska panhandle, that is, the southeastern part of Alaska and not the Arctic coast. The issue was the boundary line between the United States and Canada. This line, inland from the Alexander Archipelago, was first described in a treaty between Russia and Great Britain in 1825. Decision of the Alaskan Boundary Tribunal, 1 *Proceedings*, pt. 1 at 30-31. The same boundary description had been used in the 1867 treaty by which Russia ceded Alaska to the United States. See Argument of the United States, 5 *Proceedings*, pt. 1 at 4.

The boundary was defined in terms of the ocean and the coast. In part, it was to follow "the summit of the mountains situated parallel to the coast," provided, however, that whenever the summit was "more than 10 marine leagues from the ocean," the boundary would be "a line parallel to the windings of the coast, and which shall never exceed the distance

²¹ The letter does not describe the United States' present position. It is now established that the Florida keys do not enclose inland waters. *United States v. Florida*, 425 U.S. 791, 793 (1976); *id.*, Supplemental Report of Special Master Albert B. Maris (1975) (U.S. Ex. 85-507), reprinted in Reed et al., *supra* note 8, at 575.

of 10 marine leagues therefrom.”²² Thus, Alaska was to include a strip, or *lisière*, whose inland boundary was at most ten leagues from the coast and, if the mountains referred to were nearer, at their summit.

²² The 1825 treaty, as translated from the French in the opinion of the United States members of the tribunal, read as follows:

III. The line of demarcation between the possessions of the High Contracting Parties, upon the coast of the continent, and the islands of America to the northwest, shall be drawn in the manner following:—

Commencing from the southernmost point of the island called Prince of Wales’ Island, which point lies in the parallel of 54° 40’ north latitude, and between the 131st and the 133rd degrees of west longitude (meridian of Greenwich), the said line shall ascend to the north along the channel called Portland Channel, as far as the point of the continent where it strikes the 56th degree of north latitude; from this last-mentioned point, the line of demarcation shall follow the summit of the mountains (‘la crête des montagnes’) situated parallel to the coast, as far as the point of intersection of the 141st degree of west longitude (of the same meridian); and, finally, from the said point of intersection, the said meridian line of the 141st degree, in its prolongation as far as the Frozen Ocean, shall form the limit between the Russian and British possessions on the continent of America to the north-west.

IV. With reference to the line of demarcation laid down in the preceding Article, it is understood:

First. That the island called Prince of Wales’ Island shall belong wholly to Russia.

Second. That whether the summit of the mountains (‘la crête des montagnes’) which extend in a direction parallel to the coast, from the 56th degree of north latitude to the point of intersection of the 141st degree of west longitude, shall prove to be at the distance of more than 10 marine leagues from the ocean, the limit between the British possessions and the line of coast which is to belong to Russia, as above mentioned, shall be formed by a line parallel to the windings of the coast, and which shall never exceed the distance of 10 marine leagues therefrom.

1 *Proceedings*, pt. 1 at 47.

Both sides agreed that the maximum width of the *lisière* was to be measured from the mainland. Great Britain, however, drew the line from which to measure as crossing certain deep inlets into the mainland at their mouths, not as following all the sinuosities of the mainland shore. Case of Great Britain, 3 *Proceedings*, pt. 1 at 79–80. For Lynn Canal, a mainland indentation more than ten miles wide, it proposed a crossing where the canal first narrowed to ten miles or, with a stricter rule, to six miles. *Id.*²³

The United States argued that this procedure confused the physical coastline with the political coastline. In the United States’ view, the treaty used “coast” to mean the physical shoreline of the mainland, including all its sinuosities. Thus the *lisière* ran inland from (for example) the head of Lynn

²³ In support of a ten-mile line, Great Britain quoted the bay-closing rule from a convention on North Sea fisheries: “As regards bays, the distance of three miles shall be measured from a straight line drawn across the bay, in the part nearest the entrance, at the first point where the width does not exceed ten miles.” Case of Great Britain, 3 *Proceedings*, pt. 1 at 79. The British Counter-Case discussed additional authorities, 4 *Proceedings*, pt. 3 at 26–32, and concluded:

It is submitted that the result of the authorities is as follows:—

1. The precise limits within which international law regards bays as territorial waters have never been determined.
2. There is much authority for the opinion that a bay is not necessarily part of the high seas because its opening is wider than twice the breadth of the ordinary belt of territorial water, and that the territorial dominion over the larger gulfs must be settled by a consideration of each individual case. The possession of islands blocking or guarding the inlet, the prominence of the headlands, and the actual exercise of national authority over the waters claimed, are evidence going to justify the claim.
3. If the size and configuration of an opening is such that the line may rightly be drawn from headland to headland, the belt of territorial water is to be measured from the line *outwards*.

Id. at 32.

Canal and not from some more seaward line. In contrast, the United States said that the political coastline ran outside the islands of the Alexander Archipelago. Counter Case of the United States, 4 *Proceedings*, pt. 1 at 31-32; Argument of the United States, 5 *Proceedings*, pt. 1 at 14-18 (Ak. Ex. 85-41).²⁴ Spelling out this position at oral argument, counsel for the United States said:

²⁴ The United States said in its Counter Case:

The political coast line (since all arms of the sea not exceeding six miles, and in some cases more, in width, and all islands are practically treated as portions of the mainland) extends outside the islands and waters between them. In the present instance the political or legal coast line drawn southward from Cape Spencer would cross to the northwestern shore of Chichagof Island and follow down the western side of that island and of Baranof Island to Cape Ommaney; at this point it would turn northward for a short distance and then cross Chatham Strait to the western shore of Kuiu Island; thence again turning southward along that shore and along the outlying islets west of Prince of Wales Island, the line would round Cape Muzon and proceed eastward to Cape Chacon; thence following northward along the eastern shore of Prince of Wales Island to Clarence Strait it would cross the latter at its entrance and proceed southeastward to the parallel of 54°40' at the point where it enters Portland Canal. Thus the political coast line of Southeastern Alaska does not touch the mainland between Cape Spencer and 55° of north latitude.

Counter Case of the United States, 4 *Proceedings*, pt. 1 at 31-32. To similar effect was the printed argument of the United States:

The boundary of Alaska,—that is, the exterior boundary from which the marine league is measured,—runs along the outer edge of the Alaskan or Alexander Archipelago, embracing a group composed of hundreds of islands. When “measured in a straight line from headland to headland” at their entrances, Chatham Strait, Cross Sound, Sumner Strait and Clarence Strait, by which this exterior coast line is pierced, measure less than ten miles. That fact, according to the authorities quoted in the British Counter-Case, pp. 24-28, places them within the category of territorial waters. All of the interior waters touching upon the *lisière*, such as Behm Canal, Taku Inlet and Lynn Canal are, in the

[The political coast line] is an imaginary line which the law superimposes upon the physical coast line as a basis. But for the purposes of international law, instead of following all the convolutions and sinuosities of the coast, it is permitted to go across the heads of bays and inlets, and it is in that particular that the rule of international law comes in as to the width of bays and inlets, either 6 or 10 miles. We are not encumbered with that question, because the British Case contends that they must be 10 miles, and we do not dispute it, and these outside inlets are 10 miles. . . . The minute you establish it, the minute you fix it, all waters back of it, whether they are waters in the Archipelago there of Alexander or the Archipiélago de Los Canarios, of Cuba, they all became, as Hall says, salt-water lakes: they are just as much interior waters as the interior waters of Loch Lomond

Argument of Hannis Taylor, 7 *Proceedings* 611 (in Ak. Ex. 85-18).²⁵ It is this statement of position on behalf of the United States that is said to constitute the “full formulation” of a ten-mile rule for islands. See AB 48-49, 152-54.

The tribunal decided the issue before it in favor of the United States.²⁶ The opinions did not address the location of the political coastline.

language of Hall, “lakes enclosed within the territory”, and as such are territorial waters, regardless of their width at their entrances when measured from headland to headland.

Argument of the United States, 5 *Proceedings*, pt. 1 at 15-16. For a depiction of the boundary described, see Ak. Ex. 85-901A. Related testimony appears at Tr. 2632-40, 2716-20, 2745-47. See also Ak. Ex. 85-99, U.S. Ex. 85-328 (containing a 1952 Justice Department memorandum, “Alaskan Boundary Controversy”).

²⁵ Taylor’s reference in the last sentence is to William E. Hall, *International Law* 129-30 (4th ed. 1895) (Ak. Ex. 85-32).

²⁶ Altogether seven questions were submitted to the tribunal. Referred to here is question 5, which the tribunal answered “yes”:

e. Mississippi Sound

One more early case involving offshore islands is *Louisiana v. Mississippi*, 202 U.S. 1 (1906). The issue there was the water boundary between the two states. The Court found that the boundary followed the deep water channel, or *thalweg*, from the Pearl River into Lake Borgne and thence through Mississippi Sound to the Gulf of Mexico.

In so concluding, the Court held that Mississippi Sound was inland waters. It described the sound as follows:

Mississippi's mainland borders on Mississippi Sound. This is an inclosed arm of the sea, wholly within the United States, and formed by a chain of large islands, extending westward from Mobile, Alabama, to Cat Island. The openings from this body of water into the Gulf are neither of them six miles wide. Such openings occur between Cat Island and Isle à Pitre; between Cat and Ship Islands; between Ship and Horn Islands; between Horn and Petit Bois Islands; between Petit Bois and Dauphin Islands; and between Dauphin Island and the mainland on the west coast of Mobile Bay.

202 U.S. at 48. In considering the status of these waters, the Court quoted from *Manchester v. Massachusetts*, 139 U.S. 240, 258 (1891) (concerning Buzzards Bay, Massachusetts):

5. . . . was it the intention and meaning of the said Convention of 1825 that there should remain in the exclusive possession of Russia a continuous fringe, or strip, of coast on the mainland, not exceeding 10 marine leagues in width, separating the British possessions from the bays, ports, inlets, havens, and waters of the ocean, and extending from the said point on the 56th degree of latitude north to a point where such line of demarcation should intersect the 141st degree of longitude west of the meridian of Greenwich?

The tribunal therefore found it unnecessary to answer question 6, which asked from where the width of the *lisière* was to be measured in the event that question 5 was answered "no." 1 *Proceedings*, pt. 1 at 30-32.

We think it must be regarded as established that, as between nations, the minimum limit of the territorial jurisdiction of a nation over tide-waters is a marine league from its coast; that bays wholly within its territory not exceeding two marine leagues in width at the mouth are within this limit

202 U.S. at 52. The Court also quoted from Hall's *International Law*, *supra* note 25, concerning the coast of Cuba. 202 U.S. at 53.

Apparently the Buzzards Bay case was the controlling precedent. The Court recently said of its 1906 decision on Mississippi Sound:

The Court clearly treated Mississippi Sound as inland waters, under the category of "bays wholly within [the Nation's] territory not exceeding two marine leagues in width at the mouth."

Alabama and Mississippi Boundary Case, 470 U.S. 93, 108 (1985).²⁷

f. General statements

The precedents reviewed above all deal with particular bodies of water. In 1929, the United States had two occasions to state its policies more generally.

The first of these is unilluminating. The Norwegian government had asked the State Department for "copies of any regulations which might exist regarding the delineation of the political coastline or the drawing up of the limit between internal and territorial waters." 1 Green H. Hackworth, *Digest of International Law* 644 (1940) (Ak. Ex. 85-52). By a letter of July 13, 1929, the Department replied that the

²⁷ At present, of course, Mississippi Sound is treated as inland waters on the ground that it is a historic bay. *Alabama and Mississippi Boundary Case*, 470 U.S. 93 (1985).

"geographic points for drawing up the basic lines" had not been determined except for "certain limited areas covered by special treaty or agreement." Federal agencies had made their own determinations for administrative purposes, but no final determination had been made that would be binding on all agencies. *Id.* at 644-45.²⁸

The other occasion was a questionnaire circulated under auspices of the League of Nations. A first conference on the progressive codification of international law was in the planning stages, and territorial waters was to be one of the conference topics.²⁹ The preparatory committee asked governments to supply information on a Schedule of Points that included the following:

²⁸ I cannot agree with the United States in reading this letter as saying, USB 23, "that we had adopted *no* inland water delimitation principles." Rather it says only, as Alaska points out, that the precise lines had not been established.

Alaska observes that the State Department, with its reply, enclosed copies of pilot rules describing certain lines of inland waters. The Department noted, however, that these lines were for navigational purposes and did not represent territorial boundaries. 1 Hackworth *Digest* 645. The Court has already found that the stated limitation to navigational purposes meant what it said. *Louisiana Boundary Case*, 394 U.S. 11, 31-32 (1969).

²⁹ For details on the background of the conference, see 1 *League of Nations Conference for the Codification of International Law* [1930] (ed. Shabtai Rosenne 1975) ix-xviii. The conference documents that will be referred to below are as follows:

Conference for the Codification of International Law, 2 Bases of Discussion: Territorial Waters, League of Nations Doc. C.74.M.39. 1929.V (1929), reprinted in 2 Rosenne, *supra*, and excerpted in Ak. Ex. 85-4 (hereafter *Bases of Discussion*).

3 *Acts of the Conference for the Codification of International Law, Minutes of the Second Committee: Territorial Waters*, League of Nations Doc. C.351(b).M.145(b).1930.V (1930), reprinted in 4 Rosenne, *supra*, and excerpted in Ak. Ex. 85-1 (hereafter *Acts of Conference*).

IV. *Determination of the base line for calculation of the breadth of territorial waters.*

(a) Along the coasts. Is the line that of low tide following the sinuosities of the coast; or a line drawn between the outermost points of the coast, islands, islets or rocks; or some other line? Is the distance between islands and the coast to be taken into account in this connection?

(b) In front of bays. Breadth of the bay to be taken into account. Historic bays. Bays whose coasts belong to two or more States.

V. *Territorial waters around islands.*

An island near the mainland. An island at a distance from the mainland. A group of islands; how near must islands be to one another to cause the whole group to possess a single belt of territorial waters?

VII. *Straits.*

Conditions determining what are territorial waters within a strait connecting two areas of open sea or the open sea and an inland sea: (a) when the coasts belong to a single State; (b) when they belong to two or more States.

Bases of Discussion, *supra* note 29, at 104-05.

The United States' reply to the points was by letter of March 16, 1929. *Id.* at 128-54. The reply consisted largely of quotations from diplomatic correspondence, judicial decisions, and other primary source material.

For islands (points IV(a) and V), the material quoted included the correspondence with Cuba, *supra* page 60, and other materials that are less clear or less relevant here. *Bases of Discussion*, *supra* note 29, at 143-44, 145. The reply does not mention the Alaska boundary arbitration or any other source that might be thought to state a definite rule for

when waters landward of islands would be considered inland waters. Various distances are stated even in the authorities mentioned for bays (point IV(b)). *Id.* at 144, 131.

In addition, a rule based only on the distance of islands from the mainland or from each other would have been inconsistent with the United States' reply on straits where both coasts belonged to the same country (point VII(a)). That part of the reply cited, for example, a letter stating:

The Government of the United States will not tolerate exclusive claims by any nation whatsoever to the Straits of Magellan, and will hold responsible any Government that undertakes, no matter on what pretext, to lay any impost or check on United States commerce through those Straits.

Bases of Discussion, supra note 29, at 145, 133, quoting an instruction dated January 18, 1879, from Secretary of State Evarts to the American Legation at Santiago, Chile (as reported in 1 John B. Moore, *Digest of International Law* 664 (1906)). Surely this position did not depend on an assumption that the Strait of Magellan, formed by islands off the southern tip of Chile, was more than ten miles wide.³⁰

I am therefore left in some doubt as to whether a ten-mile rule for islands, as of 1929, was quite so well established as Alaska argues and as the Court's finding in the *Alabama and Mississippi Boundary Case* would suggest.

³⁰ In fact the Strait of Magellan contains considerable stretches less than ten miles wide and one section as narrow as two miles. The strait is about 310 miles long. See R.H. Kennedy, *A Brief Geographical and Hydrographical Study of Straits Which Constitute Routes for International Traffic*, U.N. Doc. A/CONF.13/6 & Add. 1, in U.N. Conference on the Law of the Sea, 1 Official Records 114, 120-22, 150-51, U.N. Doc. A/CONF.13/37 (1958).

3. *United States policy from 1930 to 1949*

a. *Proposals at the Hague conference of 1930*

The parties agree that the League of Nations conference in 1930 marked the beginning of a new approach in the United States' treatment of offshore islands. See AB 52-53; USB 26-29. Before the conference, as the last section described, the United States had answered a questionnaire about its policy on territorial waters by producing a long compendium of precedents. By the time the conference convened, the preparatory committee had received replies to its questionnaire from numerous governments and had drawn up a set of bases of discussion. *Bases of Discussion, supra* note 29, at 10-102; *Acts of Conference, supra* note 29, at 179-81.

United States officials responded to the bases of discussion with proposed amendments and additions. *Acts of Conference, supra* note 29, at 195-201. See also S. Whittemore Boggs, *Delimitation of the Territorial Sea: The Method of Delimitation Proposed by the Delegation of the United States at the Hague Conference for the Codification of International Law*, 24 Am. J. Int'l L. 541 (1930) (Ak. Ex. 85-61, U.S. Ex. 85-223). These proposals require careful examination, for they were later cited as the best evidence of the United States' official position.

The United States' proposals at the 1930 Hague conference included a general principle and provisions for special types of formations such as bays, islands, and straits. The general principle—now a familiar one—called for a three-mile belt of territorial sea, to be measured from the shore or the seaward limit of inland waters, by the method of arcs of circles.³¹ The provision for islands simply gave each island

³¹ The principle stated:

Except as otherwise provided in this Convention, the seaward limit of the territorial waters is the envelope of all arcs of circles hav-

its own three-mile belt of territorial sea.³² It was recognized that this treatment of islands might create small enclaves or cul-de-sacs of high seas, such as those shown earlier in figure 3.6. The United States proposed that such areas might be assimilated to the territorial sea:

G. Simplification and Assimilation.

New Basis of Discussion.

1. Where the delimitation of territorial waters would result in leaving a small area of high sea totally surrounded by territorial waters of one or more States, the area is assimilated to the territorial waters of such State or States.

2. Where the delimitation of territorial waters, as prescribed in the foregoing articles, results in a pronounced concavity such that a single straight line, not more than four nautical miles in length, . . . entirely closes an indentation, the coastal State may regard the body of water enclosed . . . as an extension of its territorial waters if the area exceeds the area of a semi-circle whose diameter is equal to the length of the straight line; if the coastal State chooses to assimilate these waters it shall notify the nations which may be interested therein.

Acts of Conference, supra note 29, at 201. Mr. S. Whittemore Boggs, the Geographer of the State Department, explained the proposal as follows in his paper published just after the 1930 conference:

ing a radius of three nautical miles drawn from all points on the coast (at whatever line of sea level is adopted in the charts of the coastal State), or from the seaward limit of those interior waters which are contiguous with the territorial waters

Acts of Conference, supra note 29, at 197.

³² The provision stated in part: "Each island . . . is enveloped by its own belt of territorial waters, measured three nautical miles outward from the coast thereof in the manner prescribed in Article" *Acts of Conference, supra* note 29, at 200.

[I]t will be found that when the arcs of circles of three-mile radius have been drawn from all points on the coastline of both mainland and islands, and when it has been determined what indentations of the coast have the configuration of closed bays whose waters are interior or national waters, there will remain small pockets of the high sea deeply indenting territorial waters. These pockets appear only where there are islands. They may be occasioned by the presence of one or more islands near the mainland, or of any number of islands at any distance from the mainland. Because the coast-line, and the groupings of islands, are of infinite variety, there is no conceivable general rule for delimiting territorial waters which will not result in these anomalies on the chart when the three-mile limit is drawn.

It was rather generally admitted, however, that these anomalous pockets of high sea should be eliminated in some simple fashion. From the viewpoints of both the navigator and the fisherman simplification is desirable.

The reasons for assimilating pockets are similar to the reasons for enclosing deep bays and other indentations in the mainland, namely, that they constitute no useful portion of the high sea from the viewpoint of navigation, and that they do not provide sufficient space in which the nationals of a foreign State may fish without encroaching upon territorial waters. The American proposal is to permit the assimilation of these pockets to the status of territorial waters (not interior waters) when a single straight line not to exceed four miles in length would enclose a pocket larger in area than a certain minimum

Boggs, *supra* page 71, at 552.

The United States' proposals on islands in 1930 were on their face inconsistent with a simple ten-mile rule for making waters behind islands inland waters. The inconsistency was not in the possible distance between islands, since a line of

up to four miles could be used to join two three-mile belts. But the 1930 proposals said that waters landward of coastal islands could be assimilated to the territorial sea; it did not convert them to inland waters. The baseline or coastline was to run around each island, and it did not include any straight lines joining islands together.

There was one possible exception to this treatment of islands. Islands might form a strait, and the United States' proposals in 1930 included one provision (paragraph 3 below) under which the waters of a strait could be inland waters:

The delimitation of territorial waters in straits shall be made in the following manner:

1. In the absence of agreement to the contrary, when both coasts of a strait which connect two seas having the character of high seas belong to a single State, and both entrances do not exceed six nautical miles in width, all of the waters of the strait are territorial waters of the coastal State; if both entrances or either one exceeds six nautical miles in width the breadth of the territorial waters is three nautical miles measured from each coast at low tide.

....

3. In the absence of agreement to the contrary, where a strait is merely a channel of communication with an inland sea, the rules regarding bays apply to such strait.

Acts of Conference, supra note 29, at 200-01.

This last paragraph, however, was apparently not meant to state an independent ground for finding inland waters. Read literally, it says that a strait cannot be treated as inland waters unless it qualifies as a bay.³³ Further, Mr. Boggs

³³ The "rules regarding bays," as proposed by the United States, were relatively elaborate. A bay was referred to as a "pronounced indentation or concavity" and was to be treated as inland waters if it met two requirements: the closing line across the bay could not exceed ten miles, and the

barely mentioned the provisions on straits in his 1930 paper, although he purported there to describe the American proposal as a whole. Boggs, *supra* page 71, at 553-54.

b. *Authority of the 1930 proposals*

The international conference at The Hague failed to adopt a convention, and the treatment of waters behind islands was considered only in subcommittee.³⁴ The United States, how-

area behind the closing line must be large enough to satisfy a geometrical formula based on the area of a semicircle. *Acts of Conference, supra* note 29, at 197-99. See also section IV(C)(2)(a), *infra*.

³⁴ The subcommittee proposed several draft articles, accompanied by observations. The article on the baseline stated: "Subject to the provisions regarding bays and islands, the breadth of the territorial sea is measured from the line of low-water mark along the entire coast." *Acts of Conference, supra* note 29, at 217. The article on islands said: "Every island has its own territorial sea." *Id.* at 219. On the topic of groups of islands, the subcommittee did not propose an article but wrote the following observations:

With regard to a group of islands (archipelago) and islands situated along the coast, the majority of the Sub-Committee was of opinion that a distance of ten miles should be adopted as a basis for measuring the territorial sea outward in the direction of the high sea. Owing to the lack of technical details, however, the idea of drafting a definite text on this subject had to be abandoned. The Sub-Committee did not express any opinion with regard to the nature of the waters included within the group.

Id. For straits "which form a passage between two parts of the high sea," the subcommittee proposed that the waters would be either territorial waters or high sea. *Id.* at 220. In commentary, it added:

The application of the article is limited to straits which serve as a passage between two parts of the high sea. It does not touch the regulation of straits which give access to inland waters only. As regards such straits, the rules concerning bays, and, where necessary, islands, will continue to be applicable.

Id. The comment indicates that a strait leading to inland waters was not automatically to become inland waters itself. Rather, the strait would

ever, gave continuing significance to its own proposals. Alaska suggests that, in later submerged lands litigation, the United States has taken varying positions about whether the assimilation method was a "mere proposal" or an official position. AB 53. Alaska itself suggests that assimilation was the rule from 1930 to 1949. AB 54. The United States now takes the view that the 1930 assimilation proposal "clearly became the United States' position," USB 27, and remained so until 1950, Tr. 3567, 3571.

The most important evidence supporting this view dates from 1949. There are two documents. The first, dated August 12, 1949, was a memorandum filed by the United States with the Special Master in *United States v. California*.³⁵ Memorandum of the United States in Response to

have to qualify independently under whatever rules were provided for bays and islands. For bays, the subcommittee recommended ten miles as the maximum closing line. *Id.* at 217. It observed that most delegations agreed to this width "provided a system were simultaneously adopted under which slight indentations would not be treated as bays." *Id.* at 218. As possibilities for such a system the subcommittee attached both the United States' proposal on bays (*supra* note 33) and a French proposal.

The full committee (the Second Committee of the conference) took no action on the subcommittee report. It explained that it had been unable to reach agreement on the breadth of the territorial sea:

The questions which that Sub-Committee had to examine are so closely connected with the breadth of the territorial sea that the absence of an agreement on that matter prevented the Committee from taking even a provisional decision on the articles drawn up by the Sub-Committee. These articles, nevertheless, constitute valuable material for the continuation of the study of the question, and are therefore . . . attached to the present report

Id. at 209, 211.

³⁵ In *United States v. California*, 332 U.S. 19 (1947), the Court held that the United States, not the State, had paramount rights in the marginal sea. See *supra* section II. The area adjudicated was described as "lying seaward of the ordinary low-water mark on the coast of California, and

Request of Special Master of June 29, 1949, *United States v. California* (No. 11, Orig.) (U.S. Ex. 85-202, Ak. Ex. 85-63). The issue at this stage was the location of the line between inland waters and the marginal sea along parts of the California coast. One of the questions addressed in the memorandum was as follows:

Question (c). — What is the status (inland waters or open sea) of particular channels and other water areas between the mainland and offshore islands, and, if inland waters, then by what criteria are the inland water limits of any such channel or other water area to be determined?

Id. at 18. In introductory remarks the United States said that this question, as well as another question on bays, "present problems which have international aspects and require a consideration of certain documentary materials reflecting developments in the field of international law." *Id.* at 6. The most important of these, the United States said, were the documents from the Hague Conference, especially the proposals of the United States delegation. *Id.* at 6-7. As to question (c) in particular, the United States said:

It is believed that the answer to this question, like that for question (b), is to be found in the proposals of the United States delegation at the 1930 Conference. The pertinent paragraphs within these proposals are those set forth under sections A, C, F and G, the subjects of the respective sections being stated as General Principle, Islands, Straits, and Simplification and Assimilation. . . .

There was considerable diversity of opinion in regard

outside of the inland waters, extending seaward three nautical miles" *United States v. California*, 332 U.S. 804, 805 (1947) (order and decree).

The United States then petitioned for a supplemental decree ascertaining the precise boundary along certain parts of the California coast. The Court appointed a special master, William H. Davis, to consider this phase of the case. See 334 U.S. 855 (1948); 337 U.S. 952 (1949).

to these matters at the time of the 1930 Conference. . . . However, a partial agreement was reflected in the portions of the Report of the Second Committee dealing with the delimitation of the territorial sea around islands and through straits connecting areas of high sea, and its conclusions in this regard did not differ materially from the recommendations made by the American delegation.

Id. at 19–20. The discussion went on to apply the United States' proposal to the channels under consideration in California. Because of the distance of the islands from the mainland, it concluded that all the intervening water areas were open sea, that they could not be assimilated, and that in any case assimilation was to the territorial sea rather than inland waters. *Id.* at 20–22.³⁶

The second document supporting the official status of the United States' Hague proposal was an aide-mémoire to Norway, dated September 29, 1949. Ak. Ex. 85-82; Ak. Ex. 85-81 (item 6); U.S. Ex. 85-209 (item 3). Here it was stated expressly that the United States was then following its proposals of 1930:

The Department of State acknowledges the receipt of the Aide-Memoire . . . dated September 9, 1949, from the Norwegian Embassy on the subject of territorial waters. The chief developments on the subject in the field of United States Federal legislation, executive pronouncements, and legal decisions since 1929, are as follows:

. . . The Federal Government is now in dispute with the State of California with respect to the location of the

³⁶ Special Master Davis later drew on this memorandum in a preliminary report to the Court in May 1951. *United States v. California*, Report of Special Master William H. Davis (under order of June 27, 1949) (1951) (Ak. Ex. 85-90), reprinted in Reed et al., *supra* note 8, at 15. He acknowledged the United States' position as stated in the 1949 memorandum, but he laid the assimilation method aside as not affecting the issue before him, namely the location of the baseline. *Id.* at 4, 36–37.

boundary line between the territorial sea and inland waters. See *U.S. v. State of California* (decree of October 27, 1947) and case now pending before the United States Supreme Court.

With regard to the demarcation of the line separating inland waters from the territorial sea, and to the geographic method of delimiting the territorial sea, the Embassy's attention is invited to the proposals made by the United States Delegation to The Hague Codification Conference of 1930 with respect to the various Bases of Discussion regarding territorial waters there considered A detailed discussion of this method is set forth in Boggs, "Delimitation of the Territorial Sea," 24 *American Journal of International Law* 541 (1930). In its trial brief in the matter of a petition for the entry of a Supplemental Decree in the case of *U.S. v. California* mentioned above, the United States Government today maintains the same method of geographic measurement of territorial waters.

These representations by the United States in 1949 appear to justify the conclusion, which both parties agree to, that the Hague proposals became the official international position of the United States. Under these proposals, the general rule was that offshore islands would have their own territorial sea and that resulting enclaves or cul-de-sacs of high seas would be handled by assimilation to the territorial sea, not by moving the baseline.³⁷ Accordingly, if there was a general

³⁷ In the *Alabama and Mississippi Boundary Case*, Mississippi did not discuss this general rule for offshore islands. Rather, it took the relevant part of the United States' 1930 proposals to be one of the provisions on straits (*supra* page 74):

[W]here a strait is merely a channel of communication with an inland sea, the rules regarding bays apply to such strait.

Brief for the State of Mississippi in Support of Motion for Supplemental Decree (Before the Special Master) at 14–15 (1983) (Ak. Ex. 85-31),

ten-mile rule for islands of which Alaska can take advantage in this proceeding, it must have become the rule after 1949.

c. *The 1940 census*

There is one document that might be thought to cast doubt on the conclusion that the assimilation method was the United States' policy for near-shore islands in the 1940s. This was a monograph prepared in connection with the 1940 census. Malcolm J. Proudfoot, *Measurement of Geographic Area* (U.S. Dep't of Commerce, Bureau of the Census, 1946) (excerpted in Ak. Ex. 85-77 and U.S. Ex. 85-706). The object of the study was to measure or remeasure the areas of states, counties, and smaller civil divisions for the purpose of computing population density. *See id.* at iii, 31-33. To measure areas along the coast, the author used "special adaptations, pertaining to embayments and islands, of the excellent principles established" in Boggs's 1930 paper. Proudfoot, *supra*, at 33. Alaska reads the adaptations for islands as amounting to "no less than the ten-mile rule." AB 59. Special Master Armstrong also quoted from Proudfoot in his 1984 report in the *Alabama and Mississippi Boundary Case*. U.S. Ex. 85-503, *supra* page 30, at 41.

Apart from any details of the rule employed, I must agree with Special Master Armstrong's remark in an earlier report concerning the same census document: "The object of a national census is obviously to determine certain statistical information for the internal use of the nation involved, and not to establish international boundaries" *United States v. Louisiana (Louisiana Boundary Case)*, Report of Special

United States v. Louisiana, 470 U.S. 93 (1985). The State characterized Mississippi Sound as "a channel, or strait connecting two inland seas, i.e., Mobile Bay and Lake Borgne." *Id.* at 41-42.

Alaska has not argued that any of the waters inside barrier islands in the Arctic are "merely a channel of communication with an inland sea."

Master Walter P. Armstrong, Jr. (1974), *supra* page 48 n.14, at 11 (finding that the census line did not constitute straight baselines within the meaning of the 1958 Convention).

Proudfoot's discussion confirms that his results were useful only for statistical purposes. He explained the undertaking and the rules used as follows:

Before measuring the areas of counties, minor civil divisions and cities, it was necessary to decide on the outer limits of the United States and to establish mutually exclusive definitions for land and water. . . .

. . . .
In the latest remeasurement of the United States, three fundamental definitions for land, inland water, and water other than inland water, were established for the first time. . . . [A]rea figures are given to enable users of statistical data to compute densities for comparison. From a statistical standpoint, small bodies of inland water are analogous to land area, but large water bodies are excluded from inland water, in order for densities not to be misleading.

A solution for the problem of setting outer limits for the United States was obtained by special adaptations, pertaining to embayments and islands, of the excellent principles established by S. W. Boggs, Geographer of the Department of State, in delimiting the territorial waters of the United States. These adaptations of Boggs' principles resulted in the following rules for delimiting coastal and Great Lakes water, and thereby, in part, for setting the outer water limits of the United States . . . : (1) where the coast line is regular it shall be followed directly unless there are off-shore islands within ten nautical miles; (2) where embayments occur having headlands of less than ten and more than one nautical mile in width, a straight line connecting the headlands shall set the limits; how-

ever, (3) the coast line shall be followed if the indentation of the embayment is so shallow that its water area is less than the area of a semicircle drawn using the said straight line as a diameter; and (4) two or more islands less than ten and more than one nautical mile from shore shall be connected by a straight line or lines, and other straight lines shall be drawn to the shore from the nearest point on each end island.

Problems pertaining to the treatment of inland water required definitions in harmony with those established for coastal and Great Lakes water and for land. . . . To meet these problems for inland water the same 4 rules were used, but a limit of 1 nautical mile was substituted for the 10 nautical mile limit. In addition, inland water was defined to include: permanent inland water surface, such as lakes, reservoirs and ponds having 40 acres or more of area; streams, sloughs, estuaries, and canals one-eighth of a statute mile or more in width; and islands having less than 40 acres of area.

Proudfoot, *supra*, at 32-33 (footnotes omitted). The rules using ten-mile lines were said to define "state water," which was to be counted in the area of the adjoining state but not in the area of counties or smaller subdivisions. *Id.* at 32 n.96. "Inland water," in contrast, was to be counted in smaller subdivisions as well. *Id.* at 37.³⁸

I find that nothing in the Proudfoot document contradicts the conclusion of the preceding section: that for some period up at least to 1949, the international position of the United States was to treat near-shore islands by the assimilation

³⁸ In a set of maps included with the study, Proudfoot at 38-51, Mississippi Sound and numerous other areas were shown as state water. Chandeleur and Breton Sounds in Louisiana—Alaska's foremost examples of the later use of a general ten-mile rule for islands—were not. *Id.* at 45. Alaska's own coastline was not shown.

method, and not by a general ten-mile rule for claiming waters inside islands as inland.³⁹

4. *United States policy, 1950-1952*

During the period 1950-1952 there were several important events bearing on United States policy for delimiting inland waters. They include, in chronological order, the following:

a. In Louisiana, the drawing of the so-called Chapman line, a tentative dividing line between state and federal submerged lands.

b. In the International Court of Justice, the briefing and argument of the *Fisheries Case*, in which both parties, Norway and the United Kingdom, referred to the delimitation practice of the United States. *Fisheries Case (U.K. v. Nor.)*, 1951 I.C.J. 116.

c. In the California litigation, the submission by the State Department of a general statement on United States policy for delimiting inland waters.

d. Also in the California litigation, the submission by Special Master Davis of his final report.

e. In Alaska, a statement by Mr. Boggs, the State Department geographer, on the method of delimiting territorial waters in the Alexander Archipelago.

³⁹ In his 1984 report, Special Master Armstrong cited Proudfoot for a proposition as to islands in the mouth of a bay, not a proposition about islands along an otherwise straight coast: "For purposes of applying the ten mile rule, where islands lie in the mouth of a bay thus creating multiple mouths, each mouth is to be considered separately." U.S. Ex. 85-503, *supra* page 30, at 40. This ties in with Mississippi's theory that, in the United States' 1930 Hague conference proposals, the provision relevant to Mississippi Sound was that providing:

[W]here a strait is merely a channel of communication with an inland sea, the rules regarding bays apply to such strait.

See *supra* note 37.

Alaska relies centrally on item a and secondarily on item b. It makes little of item c and nothing of item d. It finds item e inexplicable. See AB 62-68. I review these events below.

a. *The Chapman line (1950)*

In 1950 the Court held that in Louisiana and Texas, as in California, the Federal Government had paramount rights in the marginal sea and the States did not own the lands beneath. *United States v. Louisiana*, 339 U.S. 699 (1950); *United States v. Texas*, 339 U.S. 707 (1950). It then became important to locate the line dividing the marginal sea from inland waters, particularly in Louisiana where the coast was physically complicated and oil production was already under way.

To work out a position on the dividing line, the Department of Justice sought the aid of the State Department and later of the Interior Department and the Coast and Geodetic Survey as well.⁴⁰ The result was the Chapman line (named for Secretary of the Interior Oscar Chapman). According to later documents, the federal interagency work was concluded on October 26, 1950,⁴¹ and charts showing the line were submitted to Louisiana on March 16, 1951.⁴²

The Chapman line covered the entire Louisiana coast,

⁴⁰ See letter from Solicitor General Philip Perlman to Acting Secretary of State James Webb (May 18, 1950) (Ak. Ex. 85-84, U.S. Ex. 85-420); letter from Solicitor General Perlman to Admiral Robert Studds, Director of the Coast and Geodetic Survey (Oct. 3, 1950) (Ak. Ex. 85-58 at 131); 1 Aaron L. Shalowitz, *Shore and Sea Boundaries* 109 n.8 (U.S. Dep't of Commerce Pub. 10-1, 1962).

⁴¹ Letter from Solicitor General J. Lee Rankin to Admiral H. Arnold Karo, Director of the Coast and Geodetic Survey (Feb. 29, 1960) (Ak. Ex. 85-86, U.S. Ex. 85-404).

⁴² Reply Brief for the United States (Sept. 1958) (Ak. Ex. 85-14) at 44 n.23, *United States v. Louisiana*, 363 U.S. 1 (1960).

from the boundary with Texas to the boundary with Mississippi. Alaska refers to the line for its treatment of Chandeleur and Breton Sounds, which extend from the Mississippi River delta to Mississippi Sound. The Chapman line followed the barrier islands that form the sounds, enclosing the sounds as inland waters.⁴³ Alaska reads it as a principal example of the use of the ten-mile rule for islands. It is undisputed that the islands were all less than ten miles apart.

Also material, however, is the theory on which the Chapman line was drawn. As background for examining the theory, it may be well to review the nature of Alaska's position. The State wishes to show that the United States had a practice or a policy of claiming waters behind closely spaced barrier islands as inland waters. Even if the claim was not made specific as to the waters off the Arctic coast, Alaska asserts that the general practice or policy was so well established as to imply such a claim.

To evaluate this argument, it is necessary to consider what general principle the Chapman line exemplified. The answer to that question seems less clear than Alaska contends. There are three sources for the theory behind the Chapman line, and all are different.

(1) *Boggs's theory*

Only one of the sources is contemporaneous with the drawing of the Chapman line in 1950. This is a draft memorandum by Mr. Boggs of the State Department, dated July 6,

⁴³ For a clear map of the Louisiana coast, see *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, facing page 78 (1969). The Chapman line itself, as drawn in 1950, is not in evidence. Two segments of the 1950 line, including only the southernmost portion of Breton Sound, are shown in 1 Shalowitz, *supra* note 40, at 110-11. The Chapman line was slightly revised in 1961, and the 1961 version of the line, insofar as it affected Chandeleur and Breton Sounds, is plotted in Ak. Exs. 85-905, -905a, -906, and -906a.

1950, and marked as for Mr. Robert Vaughan in the Department of Justice. It began:

Because the waters of Chandeleur and Breton Sounds are not extensively traversed by foreign vessels bound for points in Louisiana and Mississippi, and because these sounds are so screened by a chain of islands (covering more than half the total arc of territorial sea from the Chandeleur Islands on the north to the delta coastline on the south), the maximum intervals being less than 10 miles in the north and slightly more than 6 miles in the south, it seems apparent that the waters of these two sounds should be regarded as inland waters, and not as territorial sea. Precise delimitation of these inland waters then becomes necessary.

Ak. Ex. 85-85, U.S. Ex. 85-400.⁴⁴ Although the memorandum is marked "draft," it appears to be the document referred to in a later letter by Solicitor General Rankin, *supra* note 41, which stated:

On July 6, 1950, in response to a specific inquiry in connection with the case of *United States v. Louisiana*, 339 U.S. 699, the State Department advised us that Chandeleur Sound should be considered inland water.

Mr. Boggs's grounds for making Chandeleur and Breton Sounds inland waters were not simply that the islands were less than ten miles apart. His memorandum referred also to the absence of foreign traffic in the sounds and to the fact that the islands covered more than half the total arc of territorial sea.

For the Arctic coast, the parties presented no evidence

⁴⁴ As to the usage of Chandeleur Sound, Boggs also said that the waters "are traversed by shallow draft vessels from Mississippi Sound to the Mississippi, and by ocean-going vessels bound for Gulfport and Biloxi." Ak. Ex. 85-85, U.S. Ex. 85-400 at 2.

about these extra conditions. At Stefansson Sound—the one part of the Arctic coast where there may be enclaves of federal submerged lands—it is doubtful that the last condition holds.⁴⁵

(2) *Clement's theory*

The second version of the theory behind the Chapman line comes from an official of the Bureau of Land Management. Ak. Ex. 85-87, U.S. Ex. 85-402. The document is titled "Memorandum for the Record" and dated June 23, 1954, four years after the original Chapman Line was drawn. The author is Donald B. Clement, Assistant Chief of the Division of Cadastral Engineering.⁴⁶

This memorandum is remarkable for ignoring the problem of offshore islands entirely. Instead, it simply quotes earlier writing as to when an indentation qualifies as a bay, and the paragraphs quoted were themselves only a summary of the United States' proposal at The Hague for bays and estuaries.⁴⁷ Chandeleur and Breton Sounds cannot possibly

⁴⁵ Stefansson Sound is shown, with the possible enclaves, in figure 3.2. The sound runs from about Stump Island to Brownlow Point, inside a series of fringing islands including the Midways, Cross, Narwhal, the McClures, the Stocktons, the Maguires, and Flaxman Island. National Ocean Survey, U.S. Dep't of Commerce, 9 *United States Coast Pilot* 345-47 (9th ed. 1979) (Ak. Ex. 136). *But see* Tr. 2687-88 (speculating about the eastern limit of the sound).

By the Master's measurements, the barrier islands at Stefansson Sound cover not much over a third of its total length. The entire sound, from Stump Island to Brownlow Point, is roughly sixty miles long. Of that distance, Alaska's proposed straight baselines between islands total nearly forty miles. *See* Ak. Exs. 85-920N, -920O, and -920P.

⁴⁶ For this interpretation of the signature (which might be read as "O'Connor"), compare Ak. Ex. 85-170 (items 3 and 4).

⁴⁷ The key paragraphs in Clement's memorandum appear verbatim in the United States' 1949 memorandum to Special Master Davis, *supra* pages 76-77, at 15, and in Special Master Davis's 1951 report to the

have been assumed to qualify as bays in a technical sense. Bays were generally understood to be indentations in the mainland,⁴⁸ but the mainland at Chandeleur Sound, at least, is generally convex. In addition, the United States' Hague proposal had included a semicircle test as one of the main criteria for a bay, but how a semicircle test would apply to waters behind fringing islands was apparently never discussed.⁴⁹ Finally, Mr. Boggs had made it plain that he did not consider the sounds to be bays.⁵⁰

(3) Shalowitz's theory

The third version of the theory behind the Chapman line comes from Shalowitz's book, *Shore and Sea Boundaries* (U.S. Dep't of Commerce Pub. 10-1, vol. 1, 1962). In general this volume appears to be an extremely reliable source,

Court, *supra* page 78 n.36, at 5. The 1949 memorandum, at 14-15, describes them as a summary of the 1930 proposals and refers to Boggs's 1930 paper, *supra* page 71, for more details.

⁴⁸ "Of course, the general understanding has been—and under the Convention certainly remains—that bays are indentations in the mainland . . ." *Louisiana Boundary Case*, 394 U.S. 11, 62 (1969). See also the 1930 drafts on bays described *supra* notes 33-34, pages 74-76.

⁴⁹ Shalowitz stated in 1962: "Within the author's knowledge there has neither been proposed nor developed thus far a geometric rule for determining the status (inland waters or open sea) of water areas between islands and the mainland coast similar to the semicircular rule for bays." I Shalowitz, *supra* note 40, at 161 n.124.

⁵⁰ In his 1950 memo, *supra* pages 85-86, Boggs had suggested "principles in delimiting inland waters which are not *bona fide* bays but which are screened by a series or a chain of islands comparable to those enclosing Chandeleur and Breton Sounds." Later, in a paper that grew out of his work on the Louisiana coastline, Boggs spoke of some areas behind islands as areas that should be considered inland waters "even though there is no approximation to a 'bay' as hitherto considered in the delimitation of the territorial sea." Boggs, *Delimitation of Seaward Areas under National Jurisdiction*, 45 Am. J. Int'l L. 240, 254 (1951) (Ak. Ex. 85-96, U.S. Ex. 85-224).

and it has been so treated by the parties. It has also been cited by the Court in several submerged lands cases.⁵¹

Shalowitz is the source of the statement of the ten-mile rule on which Alaska relies:

When the Chapman line was drawn along the Louisiana coast (*see* Part 1, 731), pursuant to the decision in *United States v. Louisiana*, 339 U.S. 699 (1950), the principle followed in drawing the baseline was that waters enclosed between the mainland and offlying islands which were so closely grouped that no entrance exceeded 10 nautical miles in width were considered inland waters.

I Shalowitz 161.

There are certain difficulties with this statement. It was published some twelve years after the Chapman line was drawn and three years after Alaska became a state. The principle stated is not articulated in the earlier documents regarding the Chapman line. For Alaska to have acquired rights at statehood on the basis of the principle Shalowitz stated in 1962, it would at least have to be shown that such a principle was implicit in prestatehood materials.

In addition, there is an internal inconsistency in Shalowitz's own presentation. The statement just quoted gives an unqualified version of a ten-mile rule for islands. But Shalowitz also says that the Chapman line used principles advocated before the Special Master in the California litigation:

The Chapman line was intended to represent graphically the ordinary low-water mark and the seaward limits of inland waters along the Louisiana coast. Its description

⁵¹ E.g., *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 16 n.7, 66 n.85, 71 n.95 (1969); *United States v. Maine (Rhode Island and New York Boundary Case)*, 469 U.S. 504, 517 (1985); *United States v. Louisiana (Alabama and Mississippi Boundary Case)*, 470 U.S. 93, 102 n.3, 106 n.9 (1985).

and plotting on the charts represented an effort to apply, as accurately as possible, the principles of delimitation advocated by the United States in the proceedings before the Special Master.

Id. (part 1, sec. 731) at 108. At the time the Chapman line was drawn, these principles were represented by the United States' memorandum of August 1949 (*supra* pages 76-78 and 87 n.47). The principles described in the 1949 memorandum would have conflicted with an unqualified ten-mile rule for islands.

The 1949 memorandum relied in turn on the United States' proposals at the Hague conference. The Hague proposals, as already mentioned, in general treated offshore islands by means of the assimilation method. *See supra* section F(3)(a), pages 71-74. Under that method, Chandeleur and Breton Sounds would have been largely or entirely territorial waters, depending on whether the requirements for assimilation were met.⁵²

Besides the general rule, the 1930 proposals and the 1949 memorandum can be read as providing separately for certain special cases that may involve offshore islands. A flat ten-mile rule for islands would have been inconsistent with these special provisions as well.

The provisions in question dealt with straits. For straits where the same nation holds both coasts, the American proposal in 1930 distinguished between "a strait which connect[s] two seas having the character of high seas" and "a strait [which] is merely a channel of communication with an inland sea." *See supra* page 74. Either type of strait, presumably, could be formed by offshore islands so closely grouped that no entrance would exceed ten nautical miles. A

⁵² Shalowitz treats the assimilation method only in an obscurely placed footnote, 1 Shalowitz 232 n.56.

strait between two parts of the high seas was never to be inland waters. *See id.*

Shalowitz tried to explain the treatment of Chandeleur and Breton Sounds in terms of the rule for a strait leading to an inland sea. The explanation clouds the theory of the Chapman line even further:

These principles [used in drawing the Chapman line] had been developed in international law or had been promulgated by the United States in its international relations. They involved the semicircular rule . . . and the 10-mile rule . . . for bays, and the rule for straits leading to inland waters. The latter situation did not arise in the *California* case. Along the Louisiana coast all islands are so situated in relation to the mainland and to each other as to enclose all waters landward of the islands as inland waters with the result that the islands constitute large segments of the coastline. *Mahler v. Norwich and New York Transportation Company*, 35 N.Y. 352 (1866). Also see Brief for the United States in Support of Motion for Judgment on Amended Complaint 177, *United States v. Louisiana et al.*, Sup. Ct., No. 11, Original, Oct. Term, 1957. The openings between the numerous islands along the Louisiana coast constitute channels leading to inland waters and the rule as to bays becomes applicable . . .

1 Shalowitz 108 n.7.

Shalowitz relies centrally here on the 1866 *Mahler* case.⁵³ *Mahler* did call Long Island Sound an inland sea, mentioning as a reason the distance between islands at its eastern end. But the decision long predates the statements of the

⁵³ The *Mahler* case was described in section F(2)(b). The cited brief for the United States is reviewed below in section F(5)(a); it gives no reasons but merely states the conclusion that waters landward of the Louisiana islands were inland. *See note 81 infra.*

United States' position that were current in 1950, and there is no examination of the case with respect to its current authority, its proper interpretation, or its relation to any later rules.

Shalowitz also invokes the rule for a strait leading to an inland sea, but he departs from what had previously seemed to be its natural interpretation. The United States had proposed in 1930 that, "where a strait is merely a channel of communication with an inland sea, the rules regarding bays apply to such strait." *See supra* page 74. This proposal assumes that a strait is a body of water whose status is to be determined; thus, a strait must be an area and not just a line between headlands.⁵⁴ The proposal also assumes that a strait leads somewhere and that the status of the waters in the strait depends partly on the status of the waters to which it leads. Finally, the proposal says that if a strait leads to waters of the appropriate type, then the waters of the strait itself will have their status determined according to the rules for bays.⁵⁵

⁵⁴ The same assumption appeared in the 1930 proposal on straits between two parts of the high seas, *supra* page 74: under certain conditions, "all of the waters of the strait are territorial waters . . ."

⁵⁵ An example of this pattern of reasoning is available in the *Alabama and Mississippi Boundary Case*. Mississippi said that Mississippi Sound was "a channel, or strait connecting two inland seas, i.e., Mobile Bay and Lake Borgne." *See supra* page 79 n.37. Later Special Master Armstrong found it relevant to inquire whether the ten-mile rule for bays applied separately to each opening between islands or to the lengths of all the openings added together. *See supra* page 83 n.39.

As another possible example, it could have been argued in 1950, when the Chapman line was drawn, that Chandeleur and Breton Sounds formed a strait that was only a channel of communication to Mississippi Sound—which was itself inland water under the Court's 1906 decision in *Louisiana v. Mississippi* (*supra* section F(2)(e)). Such a theory would account for some of Mr. Boggs's comments in recommending that Chandeleur and Breton Sounds be treated as inland waters. *See supra* page 86.

Shalowitz, on the other hand, refers to "the openings between the numerous islands along the Louisiana coast" as forming the relevant straits, and he refers to them as constituting "channels leading to inland waters." By eliminating the distinction between the waters of a strait and the waters with which it communicates, he makes the test for inland waters circular.

Shalowitz also refers to the rule for bays, which set a ten-mile limit on the length of a closing line. For a strait formed by islands, under the natural reading of the 1930 proposal, the ten-mile rule did not come into play unless it had already been found that the strait led only to an inland sea. In Shalowitz's treatment, it is apparently the ten-mile-or-less openings between islands that cause the openings to be straits to an inland sea. This move is a significant extension to the 1930 statements of the rule.⁵⁶ As already noted, the simple ten-mile test is also in conflict with the rule that straits between two parts of the high seas were not to be inland waters, regardless of width, and with the general rule that islands were to have their own territorial seas, subject to some increases in territorial waters by assimilation.

In summary, Shalowitz's explanation of the Chapman line is subject to numerous difficulties; it is only one of three explanations, all different; and it was written long after the fact. On the basis of the materials covered so far, I find that the theory of the Chapman line is far too uncertain to say what result it would have had if applied at Stefansson Sound.

b. *The Fisheries case (1951)*

As evidence for a rule enclosing waters behind closely spaced offshore islands as inland waters, Alaska refers also to the arguments in the *Fisheries Case (U.K. v. Nor.)*, 1951

⁵⁶ Besides the United States' version, quoted in the text, see also the treatment in subcommittee at the Hague conference, *supra* page 75 n.34.

I.C.J. 116. In the *Alabama and Mississippi Boundary Case*, a related contention by Mississippi⁵⁷ was reflected in both the Master's report⁵⁸ and in the Court's opinion, 470 U.S. 93, 106-07 (quoted *supra* page 53).

In the *Fisheries Case*, Norway had laid down a series of straight baselines along its coast north of the Arctic Circle. This coast, called the skjaergaard, is bordered by thousands of islands, islets, and rocks. Norway's baselines joined their outermost points, in several cases by lines more than ten miles long and in one instance by a line of 44 miles.⁵⁹ The United Kingdom complained that the baselines violated international law. The International Court of Justice disagreed. It said:

The Court now comes to the question of the length of the baselines drawn across the waters lying between the various formations of the "skjaergaard". Basing itself on the analogy with the alleged general rule of ten miles relating to bays, the United Kingdom Government still maintains on this point that the length of straight lines must not exceed ten miles.

In this connection, the practice of States does not justify the formulation of any general rule of law. The attempts that have been made to subject groups of islands or coastal archipelagoes to conditions analogous to the limitations concerning bays (distance between the islands not exceeding twice the breadth of the territorial waters,

⁵⁷ See Mississippi's brief before the Special Master, *supra* page 79 n.37, at 22-26 and its reply brief before the Court, *supra* page 55, at 36-39.

⁵⁸ *United States v. Louisiana (Alabama and Mississippi Boundary Case)*, Report of Special Master Walter P. Armstrong, Jr., *supra* page 30, at 50-51.

⁵⁹ For factual details, an illustration, and general discussion, see I Shalowitz, *supra* page 88, at 67-75.

or ten or twelve sea miles), have not got beyond the stage of proposals.

1951 I.C.J. at 131.

Although the court did not refer to the practice of any particular nation, the parties to the *Fisheries Case* did discuss the views of the United States. Norway described the United States' position in the 1903 Alaska boundary arbitration⁶⁰ and its correspondence during the 1860s on Cuba and the Florida keys.⁶¹ (For a summary of these materials, see *supra* sections F(2)(c)-(d).) Referring to the keys as the "skjaergaard" of Florida, Norway concluded: "In other words, the American system is the same, in this regard, as the Norwegian system."⁶²

It appears to the Master that Norway was not justified, in 1950, in making this assertion that the United States followed a straight baseline system.⁶³ The materials Norway cited dated from 1903 and earlier. It made no reference to the 1930 Hague conference, at which the United States had made different proposals. Most significantly, it made no reference to an aide-mémoire that it had solicited from the State Department in September 1949.⁶⁴ The latter document

⁶⁰ Counter-Memorial of Norway (U.K. v. Nor.), 1951 I.C.J. Pleadings (1 Fisheries Case) 477 (para. 446) (July 31, 1950) (in French).

⁶¹ *Id.* at 484-87 (paras. 461-62).

⁶² "Autrement dit, le système américain est le même, à cet égard, que le système norvégien." *Id.* at 486 (para. 462).

⁶³ Whatever Norway may have believed about United States policy, its beliefs are less directly relevant here than they were in the case of Mississippi Sound. There, the theory was that Mississippi Sound was a historic bay, and the acquiescence of foreign nations was an essential element in that theory. See *Alabama and Mississippi Boundary Case*, 470 U.S. at 101-02, 110-11. Here, the primary question is what policy the United States followed in fact, not how other nations understood the policy.

⁶⁴ The conclusions of this sentence and the preceding one are based on the parts of Norway's argument that have been cited by the parties. The

(quoted *supra* page 78) said expressly that the United States was following its Hague proposals, and it also referred to a paper that distinguished those proposals from the Norwegian system.⁶⁵

The United Kingdom was more careful in its discussion.⁶⁶ It conceded that waters landward of offshore islands could legitimately be treated as inland waters. For the waters landward of Norway's offshore islands, it even conceded that Norway had historic title. The objection of the United Kingdom was that some of Norway's baselines took in waters

Master has not made an independent study of the argument, which is entirely in French and covers several hundred pages.

⁶⁵ The aide-mémoire, *supra* page 78, referred to Boggs's 1930 paper, *supra* page 71. In this paper Boggs had written:

It may be noted, somewhat parenthetically, that . . . a large portion of the coast of Norway will present a unique problem. Much of the fjorded western coast of Norway is fringed with almost countless islands and rocks, and it is exceedingly difficult to indicate exactly which of these meet the requirements of any definition of the term "island" for delimitation purposes, and which rocks do not meet such requirements. Therefore, a navigator could not swing his arc of three-mile radius from the point on the chart indicating his position and readily ascertain whether or not he was in territorial waters or on the high sea. To describe the arcs of circles around all the technical "islands" along the Norwegian "skjaergård" would result in a series of arcs of circles of unusual complexity. For that exceptional coast it would appear that the Norwegian system of indicating arbitrary straight lines as the boundary between the territorial sea and the high sea is not only justified, but practically inevitable, and the further fact that these are rather commonly accepted as "historic" waters tends to eliminate this coast from the operation of the system proposed in the American amendment for general application.

Boggs, *supra* page 71, at 554-55.

⁶⁶ See generally Reply of the United Kingdom (U.K. v. Nor.), 1951 I.C.J. Pleadings (2 Fisheries Case) 535-39 (paras. 332-36) (Nov. 28, 1950); oral argument of the United Kingdom, 1951 I.C.J. Pleadings (4 Fisheries Case) 90-91, 94-95 (Sept. 27, 1951).

seaward of any islands, in part because the baselines were so long. For baselines of that sort, the United Kingdom said, the American precedents provided no authority. In the Alaska boundary arbitration of 1903, closing lines had been limited to ten miles, and at the 1930 Hague conference the United States had "favoured the 10-mile limit both for bays and for straits leading to interior waters."⁶⁷

I do not understand the United Kingdom to state here that every passage between offshore islands, if less than ten miles wide, would in the United States' view have constituted a strait leading to inland waters. The natural reading is that "the 10-mile limit" was just that: a limit. It was clear that a distance of ten miles or less between headlands was not thought by the United States to be a sufficient condition for a bay,⁶⁸ and I am aware of no reason why the distance between

⁶⁷ Reply of the United Kingdom, *supra* note 66, at 539 (para. 336). As to straits leading to interior waters, see *supra* page 74 (the United States' proposal in 1930); page 75 n.34 (the subcommittee report in 1930); page 79 n.37 (Mississippi's interpretation of Mississippi Sound as such a strait); and pages 91-93 (Shalowitz's interpretation of Chandealeur and Breton Sounds in terms of such straits).

⁶⁸ The United Kingdom said, in a passage relating to bays that was quoted by Special Master Armstrong (Report, *supra* page 30, at 50):

It has been disclosed in hearings before a Committee of Congress that the Federal Government is maintaining before the master [in *United States v. California*] that the principles which the United States advocated at the 1930 Conference should be applied in drawing the boundary. . . .

. . . I need not go into the past history beyond recalling that at the 1930 Conference the United States was one of the strongest proponents of the 10-mile limits for ordinary bays, and of the geometrical test of a bay. . . .

. . . my general point is that the Federal Government before the Supreme Court is vigorously maintaining the principles which it

islands would have been thought a stronger circumstance for inland waters than the distance between headlands on the mainland.

Accordingly, I believe that the arguments of Norway and the United Kingdom in the *Fisheries Case* provide no significant support for the claim that the United States consistently treated waters landward of fringing islands as inland waters, provided only that the water crossings were all less than ten miles.

c. *The State Department letter (1951)*

While the *Fisheries Case* was before the International Court of Justice,⁶⁹ the case of *United States v. California* was pending in the Supreme Court before Special Master William H. Davis. As mentioned earlier, the Master made a preliminary report to the Court in May 1951. See *supra* pages 76-78 and nn.35-36. This report described the issues, the positions of the parties, and the evidence they proposed to submit. The Court ordered a briefing on the report, 341 U.S. 946 (June 4, 1951), and subsequently ordered the Master to proceed with hearings, 342 U.S. 891 (Dec. 3, 1951).

advocated in 1930, and that this fact is entirely inconsistent with the Norwegian Government's interpretation of United States practice. It is clear that the Federal Government's views before the Supreme Court are perfectly in line with the United Kingdom's views before this Court.

Oral argument of the United Kingdom, *supra* note 66, at 86, 88, 89. As to the "geometrical test of a bay" (that is, the semicircle test), see *supra* page 74 n.33.

⁶⁹ The *Fisheries Case* was instituted on September 24, 1949, and was concluded with the judgment of December 18, 1951. See Application of the United Kingdom, 1951 I.C.J. Pleadings (I Fisheries Case) 8 (Sept. 24, 1949); Fisheries Case (U.K. v. Nor.), 1951 I.C.J. 116 (Judgment of Dec. 18).

In connection with these proceedings, the Justice Department asked the State Department for a statement as to the United States' position. The request was made by a letter of October 30, 1951, from Attorney General J. Howard McGrath to Secretary of State Dean Acheson:

When the matter is heard by the Supreme Court, this Department will desire to present a statement from the Department of State in regard to the position of the United States as to the principles or criteria which govern the delimitation of the marginal sea along the coast of this country and the demarcation of the boundary separating the marginal sea from inland waters. It will be appreciated if we may have such a statement. It is suggested that your statement may appropriately make particular reference to the matter of delimitation in the case of:

- (a) A relatively straight coast, with no special geographic features such as indentations or bays;
- (b) A coast with small indentations not equivalent to bays;
- (c) Deep indentations, such as bays, gulfs or estuaries;
- (d) Mouths of rivers which do not form an estuary;
- (e) Islands, rocks or groups of islands lying off the coast;
- (f) Straits, particularly those situated between the mainland and offshore islands.

Ak. Ex. 85-93, U.S. Ex. 85-203.

The State Department replied in a letter of November 13, 1951, over the signature of Acting Secretary James E. Webb. Ak. Ex. 85-94, U.S. Ex. 85-204, reprinted in 1 Shalowitz, *supra* page 88, at 354. This letter drew on the 1930 Hague documents, but it superseded them as the best available statement of American policy. The State Department reaffirmed the statement early in 1952, explaining that no changes were called for by the December 1951 decision in

the *Fisheries Case*.⁷⁰ Special Master Davis, in his final report in *California* in October 1952, referred to the letters at length and remarked, "I assume that with respect to what the policy of the United States now is in international relations this Court will accept without question the statement of the Secretary of State"⁷¹ The 1951 Webb letter also served as the basis of State Department testimony at congressional hearings in 1953.⁷² It should therefore be understood as a general statement, not just a statement tailored to the facts of the *California* case.

The 1951 letter began by explaining that the State Department "has been and is guided by generally accepted principles of international law and by the practice of other states" 1 Shalowitz, *supra* page 88, at 354. The letter then addressed each of the six listed topics in turn.

The letter did not state a ten-mile rule for islands. Under item e, islands lying off the coast, it simply said that islands had their own belts of territorial sea.⁷³ The main difference

⁷⁰ Letter from Secretary of State Acheson to Attorney General McGrath (Feb. 12, 1952). Ak. Ex. 85-97, U.S. Ex. 85-206, reprinted in 1 Shalowitz, *supra* page 88, at 357.

⁷¹ *United States v. California*, Report of Special Master William H. Davis (1952), at 21, reprinted in Reed et al., *supra* note 8, at 65, and in 1 Shalowitz, *supra* page 88, at 329, 340 (U.S. Ex. 85-205). However, Special Master Davis thought that the central question was the United States' policy on October 28, 1947, the date of the Court's decree in *California*. Report at 22, 1 Shalowitz at 340.

⁷² *Submerged Lands: Hearings on S.J. Res. 13 and Related Bills Before the Senate Comm. on Interior and Insular Affairs*, 83d Cong., 1st Sess. 1051, 1052 (1953) (statement of Jack B. Tate, Deputy Legal Adviser, and Raymund T. Yingling, Assistant Legal Adviser, Department of State).

⁷³ The section on islands dealt largely with the definition of an island. The parts relevant here read:

(e) With respect to the measurement of territorial waters when rocks, reefs, mudbanks, sandbanks, islands or groups of islands lie off

from the 1930 Hague proposals was that the 1951 letter did not mention assimilation as a general method for delimiting the territorial sea in the presence of islands.⁷⁴ One can only speculate about the reason for the omission.⁷⁵

As to item f, straits between islands and the mainland, the letter paraphrased the United States' position at the 1930 conference, and it summarized the subcommittee's report in 1930. As in 1930, the concept of a strait was not defined, but straits were subdivided into two categories. The first, a strait "connect[ing] two seas having the character of high seas," was never inland waters. For the second, "a strait which is merely a channel of communication to an inland

the coast, the United States took the position at the [Hague] Conference that . . . [e]ach island, as defined, was to be surrounded by its own belt of territorial waters measured in the same manner as in the case of the mainland (*Acts of Conference*, 200).

The report of the Second Sub-Committee [at the Hague Conference] defined an island . . . and approved the principle that an island, so defined, had its own belt of territorial sea (*Acts of Conference*, 219).

1 Shalowitz, *supra* page 88, at 355-56.

⁷⁴ That is, the letter contained no counterpart to the United States' 1930 proposal titled "simplification and assimilation," *supra* page 72. The 1951 letter did reflect provisions in the 1930 documents as to assimilation in certain straits. See note 76 *infra*.

⁷⁵ Perhaps the likeliest explanation is that it would have seemed inconsistent with the Chapman line to represent assimilation as the general policy. See *supra* pages 89-90.

As another possible explanation, one might note that Special Master Davis, in his May 1951 report, had already dismissed assimilation as irrelevant to the location of the baseline. See *supra* page 78 n.36. On the other hand, the request by Attorney General McGrath had covered not only the principles governing "the demarcation of the boundary separating the marginal sea from inland waters" but also those "which govern the delimitation of the marginal sea." See *supra* page 99. Assimilation certainly would have been covered by the latter description.

sea," the position was "that the rules regarding bays should apply."⁷⁶

⁷⁶ In the 1951 letter, the entire text on straits was as follows:

(f) The problem of delimiting territorial waters may arise with respect to a strait, whether it be a strait between the mainland and off-shore islands or between two mainlands. The United States took the position at the Conference that if a strait connected two seas having the character of high seas, and both entrances did not exceed six nautical miles in width, all of the waters of the strait should be considered territorial waters of the coastal state. In the case of openings wider than six miles, the belt of territorial waters should be measured in the ordinary way (*Acts of Conference*, 200-201). The report of the Second Sub-Committee supported this position with the qualification that if the result of this determination of territorial waters left an area of high sea not exceeding two miles in breadth surrounded by territorial sea, this area could be assimilated to the territorial sea (*Acts of Conference*, 220).

The Second Sub-Committee specified in its observations on this subject that the waters of a strait were not to be regarded as inland waters, even if both belts of territorial waters and both shores belonged to the same state (*Acts of Conference*, 220). In this, it supported the policy of the United States to oppose claims to exclusive control of such waters by the nation to which the adjacent shore belonged. (The Secretary of State, Mr. Evarts, to the American Legation, Santiago, Chile, January 18, 1879, in connection with passage through the Straits of Magellan, I Moore, *Digest of International Law*, 664.) With respect to a strait which is merely a channel of communication to an inland sea, however, the United States took the position, with which the Second Sub-Committee agreed, that the rules regarding bays should apply (*Acts of Conference*, 201, 220).

In connection with the principles applicable to bays and straits, it should be noted that they have no application with respect to the waters of bays, straits, or sounds, when a state can prove by historical usage that such waters have been traditionally subjected to its exclusive authority. The United States specifically reserved this type of case at the Hague Conference of 1930 (*Acts of Conference*, 197).

¹ Shalowitz, *supra* page 88, at 356. As to bays (item c), the main points mentioned in the letter were (1) a ten-mile maximum on the length of a

If there is any basis in the 1951 letter for finding a general policy that waters inside barrier islands are inland waters, it is in this last statement, applying the rules for bays to a strait leading to an inland sea. In the *Alabama and Mississippi Boundary Case*, Special Master Armstrong quoted the statement as relevant to Mississippi Sound. Report, *supra* page 30, at 48-50; see also *id.* at 52.⁷⁷ Nevertheless, the intention behind the statement remains unclear, and the parties have not explored it at any length.

d. *The Master's report in California (1952)*

In federal-state disputes over submerged lands, the problem of coastline delimitation in the presence of offshore islands has arisen repeatedly. California was the first state for which such an issue was litigated. In California, the islands are farther offshore and farther apart than in Louisiana, Mississippi, or Alaska. Therefore, as Shalowitz points out, Special Master Davis had no occasion to consider the California islands as perhaps forming straits leading only to inland waters. ¹ Shalowitz 108 n.7, quoted *supra* page 91.

Nevertheless, the Master's analysis in *California* again makes clear that the distance of islands from the mainland or from each other was not the only determinant of whether waters inside the islands would be inland waters:

Islands Lying Off the Coast

The letter from the Secretary of State of November 13, 1951 says . . . that at The Hague Conference of 1930 the United States took the position that each offshore island

closing line; (2) the need to develop a system assuring that slight indentations would not be treated as bays; and (3) the United States' 1930 proposal as one possibility for such a system. *Id.* at 355.

⁷⁷ Shalowitz had used earlier versions of the statement as part of his explanation of the Chapman line. See *supra* pages 91-93.

was to be surrounded by its own belt of territorial waters, and that this principle was approved in the Report of the Second Sub-Committee.

The rule that the baseline of the marginal belt follows the sinuosities of the coast, except where interrupted by straight-line segments not more than ten miles wide across the mouths of bays, in itself excludes the idea of drawing the coastline from headland to headland around offshore islands. . . . Subject to the special case of historical waters . . . it seems clear enough that the rule stated by the Secretary of State in his letter of November 13, 1951 is and has traditionally been the position of the United States in international relations

Straits

Subject to the special case of historical waters, the position of the United States *as to straits connecting two areas of open sea*, as set forth by the Secretary of State . . . , is that *if both entrances are less than six nautical miles wide the strait is territorial waters but never inland waters*. Otherwise, the marginal belt is to be measured in the ordinary way. *If the strait is merely a channel of communication to an inland sea the ten-mile rule regarding bays should apply*. The channels between the offshore islands and the mainland in the so-called "unit area" claimed by California connect two areas of open sea.

United States v. California, Report of Special Master William H. Davis (1952), at 26-27, *reprinted in* Reed et al., *supra* note 8, and in 1 Shalowitz, *supra* page 88, at 329, 342-43 (U.S. Ex. 85-205) (emphasis added).

The Court had more to say about the islands off California in its 1965 decision. *United States v. California*, 381 U.S. 139 (1965). The immediate point, however, concerns the policy as it was expressed in the early 1950s. Certain straits might be "less than six nautical miles wide" but, all

the same, were "never inland waters." This cannot be reconciled with a rule creating inland waters inside fringing islands if only the water crossings were all under ten miles.

e. The Alexander Archipelago (1952)

Shortly before Special Master Davis submitted his final report in *California*, one other incident took place that contributes to the picture of United States delimitation practice in the early 1950s.

The Commandant of the Coast Guard, Admiral Merlin O'Neill, wrote to Mr. Boggs in the State Department on July 15, 1952. Ak. Ex. 85-102. O'Neill sought advice about certain inquiries from the commander of a Coast Guard district in Alaska. The inquiries arose in connection with Coast Guard "enforcement of certain treaty provisions pertaining to American Fisheries and related matter." One question was:

What are the territorial waters in Alaska and how are they determined? . . . In general, it is assumed that territorial waters in Alaska extend to 3 miles seaward from a line connecting headland to headland regardless of distances between them.

Another question asked in part:

Does the United States have any territorial jurisdiction in the waters of Dixon Entrance?

Dixon Entrance is a body of water at the boundary between the United States and Canada, just south of the Alexander Archipelago.

When Boggs received this letter, he consulted Mr. Vaughan at the Justice Department (the same person with whom Boggs had worked on the Chapman Line). Ak. Ex. 85-99, U.S. Ex. 85-328. Mr. Vaughan responded by supplying some pertinent documents from the *California* case, including a working paper analyzing the 1903 Alaska bound-

ary arbitration. *Id.* For the most part the analysis was similar to that given in the present report (section F(2)(d)).

On August 1, 1952, Boggs replied to Admiral O'Neill. Ak. Ex. 85-101, U.S. Ex. 85-302. In answer to the first question, Boggs used three-mile arcs of circles. He made no reference to the United States' position at the 1903 boundary arbitration, to the Chapman Line, or to the State Department letter of November 1951:

[I]t is the position of this Government that the territorial waters of Alaska are everywhere the waters within the envelope of arcs of circles whose radius is 3 nautical miles, measured outwardly from the coast line, including all islands—properly from the intersection of the line of the low-water datum with the shore. They will therefore not include some of the waters measured "3 miles seaward from a line connecting headland to headland regardless of distances between them"

Boggs also described the 1930 American proposal on bays, and he sent O'Neill copies of his articles.

As to Dixon Entrance, Boggs gave an interpretation of the international boundary and its effect on territorial waters. Then he remarked on islands on each side of the boundary:

It is the position of the United States that the delimitation of the territorial waters in Dixon Entrance conforms to the general 3-mile rule stated above The waters of Dixon Entrance outside the 3-mile limit from the shoreline of Canadian islands are regarded as high seas. The same is true of the waters to the north of the [boundary line], outside the 3-mile limit from Alaskan islands, comprising parts of the waters of Cordova Bay, and of Clarence Strait and Revillagigedo Channel; in the case of the latter two, the pockets of sea to the north of lines four miles long, drawn between the 3-mile envelopes . . . are assimilated to the territorial waters.

This last position was a significant departure from the United States' position on the baseline at the 1903 Alaska boundary arbitration. In 1903, the United States would have closed at least Clarence Strait and Revillagigedo Channel by ten-mile lines, making the waters inside inland waters. See *supra* page 64 n.24 (quoting portions of the 1903 proceedings that mention Clarence Strait specifically); the Justice Department's 1952 working paper on the 1903 proceedings (Ak. Ex. 85-99, U.S. Ex. 85-328), at 5-6 (calling attention to the same passages). For a map attempting to represent the two positions graphically, see Ak. Ex. 85-901C (discussed at Tr. 2635-36, 2717-19, 2737, 2749).

f. Discussion

Alaska has argued that, whatever the previous policy may have been, the United States followed the ten-mile rule for islands for some period of time beginning in 1950. AB 61. By the "ten-mile rule" Alaska means the unqualified version: a policy of enclosing areas between the mainland and off-lying islands as inland waters, provided no entrance to the water areas exceeded ten miles.

The United States agrees that "some form of" a ten-mile rule was used in drawing the Chapman line, but it asserts that this was "not an unqualified principle and most likely would not serve to enclose the waters shoreward of the barrier islands off the North Slope of Alaska." USB 5-6.

The evidence reviewed in this section, covering the period 1950-1952, clearly supports the United States in saying the ten-mile rule was not an unqualified principle. Mr. Boggs, in recommending that the Chapman line close Chandleur and Breton Sounds, cited reasons besides the distance between islands. In the most authoritative document of the period, the State Department letter of November 1951, the principle stated was that "[w]ith respect to a strait which is merely a channel of communication to an inland sea . . . the

rules regarding bays should apply" *See supra* page 102 n.76. A ten-mile rule was one of the rules, but not the only rule, regarding bays. No document of the period suggests that a ten-mile rule was to be the sole determinant of whether waters behind near-shore islands were inland waters. Shalowitz, in his later book, does suggest that this is how the Chapman line was drawn, but Shalowitz contradicts himself.

The rule for straits to an inland sea can be traced back at least to the 1930 Hague conference, where it figured in the bases of discussion, the United States' proposals, and the report of the subcommittee that considered these. There were numerous versions of the rule, which differed not only in wording but also in context. For example, sometimes the rule was proposed as an article, and at other times it was stated only in commentary. Sometimes the rule coexisted with other more specific provisions for waters inside offshore islands, and sometimes, as in the 1951 State Department letter, it did not. The available documents say nothing about which changes were intended as changes of meaning. None of the statements of the rule, up to 1952, is anchored to a concrete example of its intended application.

The question remains how the principle for straits to an inland sea would have applied off Alaska's Arctic coast. There are several problems of interpretation, and although I have expressed an opinion on some of them, it may be noted that they have not been briefed. The problems include the meaning of "strait," the meaning of "inland sea," and the meaning of the conclusion that the rules for bays "should apply." The last phrase, for instance, might mean only that the rules for bays are the relevant rules, or it might mean in addition that the rules for bays should be deemed satisfied. There is also a question whether the principle would have been applied to Alaska's Arctic coast at all, given Mr. Boggs's 1952 application of a different principle in the Al-

exander Archipelago, the very place where the ten-mile rule for islands is said to have originated.

In this section I have dealt with materials only up through 1952. I now proceed to the remaining period before Alaska's statehood in January 1959.

5. *United States policy from 1953 to Alaska's statehood*

Alaska asserts that, when it became a state in January 1959, the waters inside its barrier islands in the Arctic would have been considered inland waters under the delimitation practice then prevailing. This practice, Alaska says, followed a rule that offshore islands less than ten miles apart were treated as enclosing inland waters.

In the last section I found that such a rule had not become the United States' policy by 1952. For the period from 1953 forward, the parties have discussed several additional events. The first is the enactment of the Submerged Lands Act in 1953. Alaska would read the Act as placing the "coast line" outside of closely spaced barrier islands and so as making inland waters of any waters inside this coastline. This argument has already been rejected, *supra* section D(2)(b). Congress did not speak to the definition of inland waters when it passed the Submerged Lands Act. *United States v. California*, 381 U.S. 139, 157 (1965).

Alaska refers also to the history of the Alaska Statehood Act, particularly to congressional hearings held in 1955. Again, though, it is already established that Congress meant in the Statehood Act only to apply the Submerged Lands Act to Alaska in the same way as to other states. *See supra* section D(1).

Other developments of the period are considered below. As will appear, they make little change in the previous analysis.

a. *Application of the Submerged Lands Act in the Gulf States*

When the Chapman line was drawn along the Louisiana coast in 1950, its object was to locate the inner edge of the marginal sea. By the Court's 1950 decision, that was the dividing line between state and federal submerged lands. *United States v. Louisiana*, 339 U.S. 699 (1950).⁷⁸

The Submerged Lands Act then granted, to each of the coastal states, a belt of submerged lands extending from the coastline. Initially, both the inner and the outer limits of the belt were open to question. Litigation to determine the extent of the grants began with Louisiana in 1956. *United States v. Louisiana*, 350 U.S. 990 (Mar. 26, 1956) (granting leave to file complaint); *id.*, 351 U.S. 978 (June 11, 1956) (enjoining new development in the disputed area unless by agreement of the parties filed with the Court).

The Chapman line continued to play a role in the new litigation. On October 12, 1956, the parties entered an interim agreement to govern development of the submerged lands. For purposes of administration and accounting, the agreement divided the lands into four zones, which together formed a belt extending from the Chapman line to the edge of the outer continental shelf. Louisiana was given exclusive control over the innermost zone, zone 1, which started at the Chapman line and went out three miles. The agreement contained language, however, that limited the significance of the Chapman line as a boundary:

The submerged lands in the Gulf of Mexico are divided for the purposes hereof into four zones as shown on the plat annexed hereto as Exhibit 'A,' which reflects as a

⁷⁸ More specifically, the Court's decree described the federal lands as "lying seaward of the ordinary low-water mark on the coast of Louisiana, and outside of the inland waters . . ." *United States v. Louisiana*, 340 U.S. 899 (1950).

base line the so-called 'Chapman-Line.' No inference or conclusion of fact or law from the said use of the so-called 'Chapman-Line' or any other boundary of said zones is to be drawn to the benefit or prejudice of any party hereto

United States v. Louisiana (Louisiana Boundary Case), 394 U.S. 11, 73 n.97 (1969). See also *United States v. Louisiana*, 446 U.S. 253 (1980) (interpreting the interim agreement of October 1956); 1 Shalowitz, *supra* page 88, at 130.

In the suit begun in 1956, the object of the United States was to establish that, after the Submerged Lands Act, it still had the rights in submerged lands beyond the three-mile belt. See Brief for the United States in Support of Motion for Judgment (Feb. 1957) (Ak. Ex. 85-6) at 2, *United States v. Louisiana*, 363 U.S. 1 (1960). The United States asked the Court first to determine the width of the belt that the Submerged Lands Act had granted to Louisiana, leaving for further proceedings the question of exactly where the belt began:

On a shelving and tortuous coast such as that of Louisiana, specific identification of the low-water mark and the outer limit of inland waters involves both difficult factual questions of physical observation at every disputed location and legal questions as to the definition of terms and the application of such definitions to particular physical situations. Resolution of these problems with respect to the entire Louisiana coast will be, at best, a protracted process. There are many reasons why the clear-cut legal question of the width of the marginal belt should be answered separately and in advance.

Id. at 159-60; to similar effect see *id.* at 18, 130, 134.

Thus the United States did not address the general problem of identifying inland waters in the initial stages of the Louisiana case. It did, however, reply to one of Louisiana's

arguments by observing that the Court had held Mississippi Sound to be inland waters and by adding that Chandeleur Sound was inland water as well. *Id.* at 128-29 (citing *Louisiana v. Mississippi*, 202 U.S. 1, 48, 50-53 (1906)).

Although the case was briefed and argued in 1957, it did not immediately proceed to judgment. The Court found that the issues were "so related to the possible interests" of the other Gulf States that all the interested parties should be before the Court. *United States v. Louisiana*, 354 U.S. 515 (June 24, 1957). The United States filed an amended complaint in November 1957, naming Texas, Mississippi, Alabama, and Florida as additional defendants. There followed, during 1958, a briefing on the United States' motion for judgment on the amended complaint. In evidence are the United States' brief and reply brief, dated May 1958 and September 1958 respectively. Brief for the United States in Support of Motion for Judgment on Amended Complaint (May 1958) (Ak. Ex. 85-7), *United States v. Louisiana*, 363 U.S. 1 (1960); Reply Brief for the United States (Sept. 1958) (Ak. Ex. 85-14), *United States v. Louisiana*, 363 U.S. 1 (1960).

In the 1958 briefs, the United States took much the same position as in 1957. It repeated that only the width of the belt granted by the Submerged Lands Act to each state was presently at issue and that the location of the baseline should be considered later. Brief of May 1958, *supra*, at 321-22; Reply Brief of September 1958, *supra*, at 53 & n.30.

At the same time, in the course of discussing the seaward boundaries of the states, the United States included several comments to the effect that waters behind offshore islands in Louisiana, Mississippi, and Alabama were all inland waters. Brief of May 1958, *supra*, at 177 (Louisiana), 254 (Mississippi), 261 (Alabama); Reply Brief of September 1958, *supra*, at 43-45, 81, 83. Alaska puts considerable emphasis on

these statements, and it notes particularly that the State Department approved the briefs before they were filed. Furthermore, the 1958 briefs postdated the Convention on the Territorial Sea and the Contiguous Zone, which had been adopted by the United Nations Conference on the Law of the Sea and opened for signature in April 1958.

I cannot give these briefs much weight as evidence of the delimitation policy that the United States would have applied to Alaska's Arctic coast in late 1958 or early 1959. They are subject to at least three difficulties. First, the location of the Gulf States' coastlines was specifically left open for later adjudication. In Louisiana, where the United States' position was based on the Chapman line, the interim agreement said that "no inference or conclusion of fact or law" was to be based on the use of the line. When the Court handed down its decision in 1960, it made clear that it did not take the coastlines as established:

The Government concedes that all the islands which are within three leagues of Louisiana's shore and therefore belong to it under the terms of its Act of Admission, happen to be so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters. Thus, Louisiana is entitled to the lands beneath those waters quite apart from the affirmative grant of the Submerged Lands Act, under the rule of *Pollard's Lessee v. Hagan*, 3 How. 212. Furthermore, since the islands enclose inland waters, a line drawn around those islands and the intervening waters would constitute the "coast" of Louisiana within the definition of the Submerged Lands Act. Since that Act confirms to all States rights in submerged lands three miles from their coasts, the Government concedes that Louisiana would be entitled not only to the inland waters enclosed by the islands, but to an additional three miles beyond those islands as well. *We do*

not intend, however, in passing on these motions, to settle the location of the coastline of Louisiana or that of any other State.

United States v. Louisiana, 363 U.S. 1, 66 n.108 (1960) (emphasis added).

Second, the briefs were based on the United States' delimitation policy as of 1953, when the Submerged Lands Act became law. They did not purport to reflect any changes that might have been called for by the 1958 Convention. The May 1958 brief said, of the width of the marginal belt:

Any change on the international law on the subject, brought about by international agreement after May 22, 1953, is of course immaterial so far as the present case is concerned since, under the Submerged Lands Act, a change in the boundary after the passage of the Act would be ineffective to increase the grant made therein.

Brief of May 1958, *supra* page 112, at 60 n.12. Any changes in the baseline, if brought about by international agreement after May 22, 1953, would probably have been considered equally immaterial.⁷⁹ The State Department's approval of the 1958 briefs, therefore, is not enough to show what the general policy was as of 1958.⁸⁰

Finally, neither the 1958 briefs nor the various documents preceding them explained the theory underlying the concession that waters behind islands in Louisiana, Mississippi, and

⁷⁹ The United States took this position expressly in *United States v. California*, 381 U.S. 139, 164 (1965).

⁸⁰ As to what the general policy actually was as of 1958, see *infra* section F(5)(e). That section also details the evidence regarding State Department approval of the briefs, which comes from a letter dated February 29, 1960, from Solicitor General Rankin to Admiral Karo, director of the Coast and Geodetic Survey. Ak. Ex. 85-85, U.S. Ex. 85-404, quoted *infra* note 102.

Alabama were inland waters.⁸¹ Several officials of the Interior Department had indicated that such waters were inland, usually without giving any grounds for the conclusion.⁸²

⁸¹ It has already been noted that the theory of the Chapman line itself was unclear. See *supra* section F(4)(a). Shalowitz cited one of the briefs in explaining the Chapman line, see *supra* page 91 & n.53, but the material he cited was only a conclusion: "It happens that all the islands on the coast of Louisiana are so situated that the waters between them and the mainland are sufficiently enclosed to constitute inland waters . . ." Brief of May 1958, *supra* page 112, at 177.

⁸² Letter from Secretary Oscar L. Chapman to Governor Wright of Mississippi (Oct. 17, 1951) (Ak. Ex. 85-92, U.S. Ex. 85-501) (Mississippi Sound); memorandum from Acting Solicitor J. Reuel Armstrong to the Secretary of the Interior (Opinion M-36239, Oct. 1, 1954) (Ak. Ex. 85-37, Ak. Ex. 85-335, U.S. Ex. 85-403) (Louisiana); memorandum from Donald B. Clement, Acting Cadastral Engineering Staff Officer, to James D. Parriott, Jr., Associate Solicitor for Public Lands (Dec. 7, 1954) (Ak. Ex. 85-107, U.S. Ex. 85-500) (Alabama); memorandum from the Director, Bureau of Land Management, to Assistant Secretary D'Ewart (June 15, 1956) (Ak. Ex. 85-126) (Alabama).

The only one of these documents to state grounds for considering waters inland was the 1954 Solicitor's opinion, at 3:

[I]t is clear that the term "coast line" [in the Submerged Lands Act] means the line where the land of the State of Louisiana meets the waters of the Gulf of Mexico except that where those waters extend inland between headlands in the form of bays or other inlets the line is that which separates the "inland waters" of the inlet from the main body of water forming the Gulf of Mexico. (Of course, this includes any waters, in the form of a sound, lying inshore from a series of islands which border the coast if the greatest water distance between any two contiguous islands does not exceed 6 miles.)

The Solicitor's use of a six-mile rule for islands seems to be explained by his citation later in the same paragraph to *Louisiana v. Mississippi*, 202 U.S. 1 (1906), and *Manchester v. Massachusetts*, 139 U.S. 240 (1891). See *supra* section F(2)(e).

Although Alaska suggests that the Solicitor meant to say "ten miles," this reading seems unwarranted. It is true, as Alaska notes, that the Solic-

There was no mention of either a ten-mile rule or a rule for straits to an inland sea. The only authorities cited in the briefs were *Louisiana v. Mississippi*, 202 U.S. 1 (1906), which the United States read as holding that Mississippi Sound was inland water, and *Mahler v. Norwich & New York Transportation Co.*, 35 N.Y. 352 (1866), which the United States interpreted as saying—uninformatively for present purposes—“that a boundary will extend out from the shore to embrace those islands which are so situated as to enclose inland waters.” Reply Brief of September 1958, *supra* page 112, at 85. The first case mentioned that the islands in Mississippi Sound were all less than six miles apart; the second, that islands in Long Island Sound were separated by less than five miles. See *supra* sections F(2)(b) and (e). This does not show the existence of a ten-mile rule for islands.

b. Fishing regulations in Alaska

Alaska offers one more category of evidence to show that waters inside fringing islands were claimed as inland waters in the period just before statehood. The principal item is a regulation issued by the Department of the Interior on July 20, 1956, defining the term “waters of Alaska”:

§ 101.19 *Waters of Alaska*. As used in this subchapter, the term “waters of Alaska” includes those waters north and west of the International Boundary at Dixon Entrance extending three miles seaward (a) from the coast, (b) from lines extending from headland to headland across all bays, inlets, straits, passes, sounds and entrances, and (c) from any island or groups of islands, in-

itor also cited Boggs’s 1930 paper, *supra* page 71; but that paper, which used the assimilation method for waters behind offshore islands, would not have supported either a six-mile or a ten-mile rule for making such waters inland.

cluding the islands of the Alexander Archipelago, and the waters between such groups of islands and the mainland.

21 Fed. Reg. 5446 (1956) (adding 50 C.F.R. § 101.19).⁸³ The authorizing legislation for this regulation was the White Act, which provided:

That for the purpose of protecting and conserving the fisheries of the United States in all waters of Alaska the Secretary of Commerce from time to time may set apart and reserve fishing areas in any of the waters of Alaska over which the United States has jurisdiction, and within such areas may establish closed seasons during which fishing may be limited or prohibited as he may prescribe.

⁸³ The regulation was reissued, with minor changes of wording, in 1958 and 1959. 23 Fed. Reg. 2503, 2504 (Apr. 17, 1958) (50 C.F.R. § 101.20); 24 Fed. Reg. 2053, 2055 (Mar. 19, 1959) (50 C.F.R. § 101.20). In 1960 the regulation was dropped as superseded by the operation of the Alaska Statehood Act. 25 Fed. Reg. 7681 (Aug. 12, 1960) (notice of proposed revision of fish and wildlife regulations); 25 Fed. Reg. 8397 (Sept. 1, 1960) (revision and reorganization of 50 C.F.R.).

Alaska has referred to the regulation as being republished in 1960. The 1960 version dealt only with the definition of the “North Pacific area,” an area of high seas within which salmon fishing was prohibited to persons or vessels subject to the jurisdiction of the United States. The definition excluded the areas that in 1956 had been called “waters of Alaska”:

For the purpose of the regulations of this part the North Pacific area is defined to include all waters of the North Pacific Ocean and Bering Sea north of 48 degrees 30 minutes north latitude, exclusive of waters adjacent to Alaska north and west of the International Boundary at Dixon Entrance which extend three miles seaward (a) from the coast, (b) from lines extending from headland to headland across all bays, inlets, straits, passes, sounds and entrances, and (c) from any island or groups of islands, including the islands of the Alexander Archipelago, and the waters between such groups of islands and the mainland.

25 Fed. Reg. 8397, 8422 (Sept. 1, 1960) (50 C.F.R. § 210.1).

Act of June 6, 1924, ch. 272, § 1, 43 Stat. 464, as amended by Act of June 18, 1926, ch. 621, 44 Stat. 752 (formerly codified at 48 U.S.C. § 221).⁸⁴

In 1957, the year after the regulation was first issued, two employees of the Bureau of Fisheries prepared charts interpreting the regulations graphically. The authors were Mr. Gharrett and Mr. Scudder, and their interpretation became known as the Gharrett-Scudder line. Several of the charts, including one of the entire Arctic coast, are reproduced in *Provisional U.S. Charts Delimiting Alaskan Territorial Boundaries, Hearing Before the Senate Comm. on Commerce*, 92d Cong., 2d Sess. (1972) (Ak. Ex. 85-23) (pocket supp., nos. 5-10). See also *id.* at 35 (testimony introducing the charts). As Alaska points out, the charts clearly depict straight baselines. As the United States points out, the lines are not limited to ten miles. The chart for the Arctic coast (pocket supp., no. 5) places considerably more submerged land behind the baseline than Alaska claims here.

Alaska notes especially that the State Department later characterized the regulation defining "waters of Alaska" as "adoption by United States of straight baseline method in measuring limits of territorial waters of Alaska." The characterization appeared in three historical studies, published in 1963, of the status of certain waters off the west coast of Canada.⁸⁵ The United States, on the other hand, offers a

⁸⁴ The functions of the Department of Commerce under the White Act were transferred to the Department of the Interior in 1939. Reorg. Plan No. 2, § 4(e), 3 C.F.R. 254, 256 (Supp. 1939), reprinted in 5 U.S.C. app. at 1435, 1436 (1994).

⁸⁵ Historical Studies Division, U.S. Dep't of State, Research Project No. 637A, Status of Dixon Entrance, 1867-1963, at 25 (1963) (Ak. Ex. 85-127, U.S. Ex. 85-230); *id.*, Research Project No. 637, Status of Hecate Strait, 1876-1963, at 19 (1963) (Ak. Ex. 85-128); *id.*, Research Project No. 637B, Status of Queen Charlotte Sound, 1897-1963, at 13 (1963) (Ak. Ex. 85-129).

1962 letter, from Secretary of the Interior Stewart Udall to Secretary of State Dean Rusk, stating that the regulations "defined fishing districts for management purposes only and were not intended to enlarge or extend the territorial waters of Alaska in a legal or jurisdictional sense." U.S. Ex. 85-303; also in Ak. Ex. 85-46, tab 2.⁸⁶

The Court has considered most of this material before. *United States v. Alaska*, 422 U.S. 184 (1975), concerned the status of Cook Inlet, on the southern Alaskan coast. Alaska claimed that the inlet was inland waters on the ground that it was a historic bay. It was agreed that, if the historic bay claim failed, then the disputed part of the inlet was high seas.

In support of the historic bay claim, Alaska sought to show that the United States had exercised sovereignty over Cook Inlet during the territorial period. For this purpose, Alaska relied in part on federal fishing regulations, including the regulations issued under the White Act and interpreted by the Gharrett-Scudder line. See 422 U.S. at 194. Although the Court's opinion did not mention the definition of

⁸⁶ Secretary Udall explained in his letter, U.S. Ex. 85-303:

So far as we can ascertain the regulations have never been invoked against any foreign fishing vessel. The White Act, under which the regulations were issued, does not provide that it shall be applicable to foreign vessels or nationals. The Act of June 14, 1906 (34 Stat. 264; 48 U.S.C. 244-247) had already prohibited alien persons from fishing for any species of fish "in any of the waters of Alaska under the jurisdiction of the United States" except by rod, spear, or gaff. The laws of the United States since 1793 had restricted fishing in American waters to vessels of the United States (46 U.S.C. 251). Since the problem of fishing by aliens had already been dealt with by these acts, the White Act undertook only to regulate fishing by United States citizens within the territorial waters from which aliens had, for all practical purposes, already been excluded. Any regulations promulgated under the White Act could not therefore be considered under any circumstances to be an assertion of territorial jurisdiction against foreign nationals.

"waters of Alaska" specifically, it did include an extended discussion of the Gharrett-Scudder line:

The Gharrett-Scudder line. In 1957 representatives of Canada and of the United States met to discuss the possibility of prohibiting citizens of the two countries from fishing with nets for salmon in international waters in the North Pacific. The delegates generally agreed that the line used by the United States for enforcing fishing regulations under the White Act and related statutes would be used to delimit "offshore waters" for purposes of the joint salmon fishing limitations. Since the Canadian delegates felt that the description of the closing lines connecting headlands in the Alaska fishery regulations were not definitive, they requested a map showing the American line with greater precision. Two United States Bureau of Fisheries employees, John T. Gharrett and Henry Clay Scudder, prepared a chart of the Alaska coast with a line reflecting the boundaries in the then-current United States fishery regulations. This so-called Gharrett-Scudder line enclosed all the waters of Cook Inlet. Charts reflecting the line were transmitted to the Canadian delegates. It is undisputed that the exact location of the Gharrett-Scudder line was determined primarily with reference to the needs of fishery management. The maps were forwarded by the Bureau of Fisheries to the State Department for transmittal to the Canadian delegates with express disclaimers that the line was intended to bear any relationship to the territorial waters of the United States in a legal sense.

....
 ... [T]he Gharrett-Scudder line ... was drawn almost solely with reference to the needs of the coastal salmon net fisheries and was never intended to depict the boundaries of the territorial waters of the United States. Indeed, the very method of drawing the fishery boundaries by use

of straight baselines conflicted with this country's traditional policy of measuring its territorial waters by the sinuosity of the coast. See *United States v. California*, 381 U.S. at 167-169.

422 U.S. at 194-96, 199 (footnote omitted). See also *id.* at 195 n.16 (quoting testimony of Mr. Gharrett, including testimony that the line was not intended to represent the baseline from which the territorial sea was to be measured).

The Court found that the federal fish and wildlife regulations did not imply that the United States was treating the disputed part of Cook Inlet as inland waters. The regulations treated foreign vessels no differently from American vessels, and there was no evidence that they had been enforced against foreign vessels. Enforcement against American vessels in Cook Inlet was not probative, because the United States can enforce fish and wildlife regulations against American nationals even on the high seas. 422 U.S. at 198.

The Court's analysis is controlling here. If the fishery regulations did not amount to an inland-water claim for Cook Inlet, neither did they make such a claim along the Arctic Coast.⁸⁷ Consequently, I can give no weight to the

⁸⁷ If anything, the ground for finding an inland-water claim on the Arctic coast is even weaker. Although both Cook Inlet and the area disputed in the present case were covered by the Gharrett-Scudder line and the definition of "waters of Alaska," Cook Inlet had also been part of a fishing area defined under the White Act ever since 1924. 422 U.S. at 194.

The last condition does not hold for the part of the Alaska coastline disputed here, which extends from Icy Cape (above 70 degrees north latitude) to the Canadian border (near Demarcation Point). In early versions of the White Act regulations, the northernmost fishing area stopped at 66 degrees north latitude. E.g., 50 C.F.R. § 203.1 (1940) (defining the Yukon-Kuskokwim area); 50 C.F.R. § 103.1 (1949) (same). In 1956, when the general definition of "waters of Alaska" was adopted, the northern end of the northernmost fishing area was changed to Point Hope,

statement, made by a State Department official in earlier historical studies, *supra* note 85, that the regulation defining "waters of Alaska" was the adoption of a baseline for the territorial sea.⁸⁸

c. General statements

During the 1950s, while the United States was taking positions on its delimitation policy in the context of the submerged lands cases, it was also participating in international meetings that were a follow-up to the 1930 Hague conference. The first meetings were those of the International Law Commission, which worked on the topic of territorial waters from 1951 to 1956.⁸⁹

which is near 68 degrees north latitude. 21 Fed. Reg. 5446 (July 20, 1956) (amending 50 C.F.R. § 103.1). It was apparently not until 1958 that the area disputed here was brought within a defined fishing area. 23 Fed. Reg. 2503, 2506 (Apr. 17, 1958) (amending 50 C.F.R. § 103.1 to read, "The Arctic area includes all waters of Alaska between Demarcation Point and Cape Newenham").

⁸⁸ A fortiori I can attach no importance to the statement, made in the same studies, that the 1960 regulation defining the North Pacific area (*supra* note 83) was "action by the United States indicative of support for the straight baseline method." Furthermore, the author of the historical studies recognized that his interpretation was contrary to that in Secretary Udall's letter, *supra* note 86 and accompanying text. See Status of Dixon Entrance, 1867-1963, *supra* note 85, at 27-28; Status of Hecate Strait, 1876-1963, *supra* note 85, at 21; Status of Queen Charlotte Sound, 1897-1963, *supra* note 85, at 15.

⁸⁹ The International Law Commission was created, pursuant to a 1947 resolution of the United Nations General Assembly, to promote the progressive development and codification of international law. G.A. Res. 174 (II), 2 U.N. GAOR (123rd plen. mtg., Nov. 21, 1947) at 105, U.N. Doc. A/519 (1948). The Commission initiated work on the topic "régime of territorial waters" in 1951. *Report of the International Law Commission to the General Assembly*, 6 U.N. GAOR Supp. (No. 9) at 17, U.N. Doc. A/1858 (1951), reprinted in [1951] 2 Y.B. Int'l L. Comm'n 123,

The Commission's final report became the starting point for the first United Nations Conference on the Law of the Sea, held at Geneva in 1958. It was the 1958 conference, of course, that produced the Convention on the Territorial Sea and the Contiguous Zone, on whose provisions the United States now relies.

The parties have presented a number of internal State Department memoranda discussing the final report of the International Law Commission. Most relevant here is the memorandum on the Commission's treatment of islands, an 83-page document dated September 1957. Memorandum from Benjamin H. Read to Raymund T. Yingling, "Islands, Drying Rocks and Drying Shoals Under Existing International Law Compared with Articles 10 and 11 of Part I of the Final Report of the International Law Commission on the Regime of the Territorial Sea" (Sept. 1957) (Ak. Ex. 85-30, U.S. Ex. 85-227).⁹⁰ The memorandum undertook to analyze the rules proposed by the Commission, particularly "whether the rules reflect existing international law or prevalent state practice or mere legislation by the Commission," *id.* at 3, and it summarized a great deal of background material.

The Commission's proposed article on islands, article 10, said in relevant part, "Every island has its own territorial sea." In commentary, the Commission mentioned that the article applied "both to islands situated in the high seas and to islands situated in the territorial sea." It also remarked

140, U.N. Doc. A/CN.4/SER.A/1951/Add.1. For the Commission's final report on territorial waters, see note 91 *infra*.

⁹⁰ Other similar memoranda dealt with the ILC's articles 4 and 5 (normal and straight baselines) (Ak. Ex. 85-35); article 6 (outer limit of the territorial sea) (U.S. Ex. 85-225); article 7 (bays) (Ak. Ex. 85-3, U.S. Ex. 85-226); and articles 8 and 9 (ports and roadsteads) (Ak. Ex. 85-132). There may also have been a memorandum on straits, see Ak. Ex. 85-35, *supra*, at 32, but it is not in evidence.

that it had not dealt with the problem of groups of islands but that the article on straight baselines might apply.⁹¹

The State Department memorandum, commenting on this material, found that international law on groups of islands was unsettled. It identified both a "traditional view," which "excluded all special rules for island groups," as well as "two lines of authority contrary to the traditional view The first concerns the unity of islands, called coastal islands herein, and a nearby mainland coast. The second relates to the unity of islands, called 'ocean islands' herein, in a group not near the mainland." Ak. Ex. 85-30, U.S. Ex. 85-227, *supra*, at 11-13. The memorandum characterized the United States, at the time of the 1930 Hague conference, as favoring the traditional view (modified by assimilation). *Id.* at 12. It did not attempt to characterize the United States' position since 1930. *See id.* at 13-17. Had the United States adopted

⁹¹ The commentary stated:

(3) The Commission had intended to follow up this article with a provision concerning groups of islands. Like The Hague Conference for the Codification of International Law of 1930, the Commission was unable to overcome the difficulties involved. The problem is singularly complicated by the different forms it takes in different archipelagos. The Commission was prevented from stating an opinion, not only by disagreement on the breadth of the territorial sea, but also by lack of technical information on the subject. It recognizes the importance of this question and hopes that if an international conference subsequently studies the proposed rules it will give attention to it.

(4) The Commission points out, for purposes of information, that article 5 [straight baselines] may be applicable to groups of islands lying off the coast.

Report of the International Law Commission to the General Assembly, 11 GAOR Supp. (No. 9) at 15, U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. Int'l L. Comm'n 253, 270, U.N. Doc. A/CN.4/SER.A/1956/Add.1.

a ten-mile rule for coastal islands, one would certainly expect to find it reflected in this memorandum.⁹²

The memorandum did quote, without comment, from the first draft of the Restatement of the Foreign Relations Law of the United States. *Id.* at 74-75. Like the 1951 State Department letter, the Restatement described, first, a general rule that waters inside offshore islands were territorial seas or high seas and, second, an exception for a channel of communication to inland waters. Restatement of the Foreign Relations Law of the United States § 6(4) (Tent. Draft No. 1, Apr. 26, 1957). Once again, there was no mention of a simple ten-mile rule for islands.⁹³

⁹² Alaska notes that the memorandum discussed the United States' earlier correspondence on Cuba and also its reaction to a recent Cuban law adopting a ten-mile rule. Of the latter the memorandum said:

Cuban Law Decree No. 1948 of January 25, 1955, stated in article 1 that: "The waters between the coasts of the Island (of Cuba) and all adjacent keys, when the distance between them and between the keys themselves do not exceed 10 miles, are declared interior seas." The U.K. and U.S. protested other portions of this law but asked for clarification of how actual baselines would be drawn under article 1, which has not been forthcoming to date of this writing.

Ak. Ex. 85-30, U.S. Ex. 85-227, *supra* page 123, at 64 (footnote omitted). The United States seems entirely correct in observing that, even if it acquiesced in this claim, the acquiescence would not show that the United States itself followed the same practice.

⁹³ A second Restatement draft, which refined the first somewhat but did not make major changes, was also published before Alaska's statehood. Restatement of the Foreign Relations Law of the United States (Tent. Draft No. 2, May 8, 1958). This document took account of international materials up through the final report of the International Law Commission in 1956. The section of interest was now section 5:

§ 5. Base Line Separating Inland Waters From Territorial Sea

....

(3) The base line may be independent from the low water mark and be determined by a line drawn:

d. Findings on pre-Convention policy

The claim being examined is Alaska's contention that, under the delimitation policies followed by the United States as of January 3, 1959, the waters behind fringing islands along Alaska's north coast would have been considered inland waters. The first issue raised by this claim is whether

(a) Across the opening of a bay, gulf or estuary when its opening does not exceed ten nautical miles, or if it exceeds ten nautical miles, between the outermost points in the opening where the line does not exceed ten nautical miles;

(b) Across the opening of a bay, whatever its width, which by historical usage has been traditionally subjected to the exclusive jurisdiction of the state;

....

(4) When an island or group of islands belonging to a state lies off its coast, the base lines on the mainland and on the island or on each island in the group are determined separately and are not joined together. The strait or sound between the base lines of the mainland and of an island or group of islands, or between the base lines of islands in the group, is territorial sea or high seas, as the case may be, except that it is inland waters if:

(a) It is a channel of communication solely to or from inland waters of the state, and would be inland waters by application of the principles applying to bays; or

(b) By historical usage it has been traditionally subjected to the exclusive jurisdiction of the state.

(5) When the coast of a state is deeply indented and broken up by scatterings of islands, rocks and reefs in its immediate vicinity, and special economic interests of the state have developed by historical usage in the waters in between, the state is entitled to determine the base line by joining certain points on the headlands on the mainland and on the seaward edge of offlying islands, rocks and reefs, provided the resulting base line follows the general direction of the coast.

Comment:

....

c. The rules stated in this Section are in accord with a comprehensive statement of the position of the United States on the subject

the United States did in fact develop such a policy. Substantially all the prestatehood evidence that might support the claim has been reviewed above, along with some of the later interpretation of prestatehood events.

(1) The ten-mile rule

The evidence plainly shows that, as of Alaska's statehood, the United States had not developed a general policy of claiming as inland waters any waters behind islands that satisfied a ten-mile rule. At January 3, 1959, no such general rule had ever been announced as American policy, unless perhaps in the Alaska Boundary Arbitration of 1903. The rule that had been recently stated, in various forms, was a rule for straits to an inland sea. The latter was clearly not equivalent to a simple ten-mile rule for islands.

Besides general statements about the rules, there were also some recent concrete precedents at Alaska's statehood. The United States had conceded that the waters inside fringing islands off Louisiana, Mississippi, and Alabama were all inland waters. But the reasoning behind the concession was obscure, and the United States did not elucidate it in its briefs to the Court. A ten-mile rule for islands was only one

given by the Acting Secretary of State to the Attorney General in a letter dated November 13, 1951

d. The rules stated in this Section are also in accord with the position taken on the subject by the International Law Commission of the United Nations, except on two points.

The first point concerns the length of the base line which may be drawn across the opening of bays, gulfs and estuaries. ...

The second point involves the exceptional situation stated in Subsection (5). ...

e. For illustrations of the drawing of the base line, see Boggs, *Delimitation of the Territorial Sea*, 24 A.J.I.L. 541 (1930); Boggs, *Delimitation of Seaward Areas under National Jurisdiction*, 45 A.J.I.L. 240 (1951).

of several possible explanations, and the prestatehood evidence does not indicate that such a rule was actually used at the time.⁹⁴ Another possible explanation was the rule for straits to an inland sea, but no one mentioned that rule explicitly in prestatehood documents on the Gulf States.⁹⁵ Yet another variation on the theory was suggested by Mr. Boggs, whose draft memorandum of July 6, 1950, mentioned several factors as contributing to his recommendation to close Chandeleur and Breton Sounds, including the fact that the islands covered more than half the total arc of territorial sea. *See supra* page 85. But Mr. Boggs's reasoning in this memorandum was not reported in any published documents.⁹⁶ And in 1952, Mr. Boggs advised the Coast Guard that it was "the position of the United States" that the territorial sea in the Alexander Archipelago was measured using the assimilation method, not using lines connecting islands. *See supra* page 106.

(2) *The assimilation method*

The evidence also shows, in my opinion, that the assimilation method was not the United States' general policy at Alaska's statehood. It was omitted from the State Department's 1951 letter, *see supra* page 101 and nn.74-75, and

⁹⁴ Shalowitz, writing in 1962, did assert that the original Chapman line was drawn using a simple ten-mile rule for islands. 1 Shalowitz 161, quoted *supra* section F(4)(a)(3). But the only prestatehood statements about how the Chapman line was drawn gave no such clear-cut explanation. *See supra* section F(4)(a)(1)-(2).

⁹⁵ Shalowitz also mentioned this rule in his 1962 treatment. 1 Shalowitz 108 & n.7, quoted *supra* section F(4)(a)(3).

⁹⁶ Boggs did publish a paper in 1951 (*supra* note 50) that was based on his work on the Louisiana coastline. But the reasoning in the paper is different from the reasoning in the memorandum, and, as the United States points out, no one ever cited the 1951 paper as representing official United States policy.

from the Department's 1953 testimony on submerged lands legislation, *supra* page 100 n.72. Whatever the status of Mr. Boggs's 1952 letter, the United States appears to have disavowed the method at the 1958 Geneva conference. Under consideration was a draft article which had been adopted by the International Law Commission and which permitted enclaves of high seas to be assimilated to the territorial sea if they were not more than two miles wide.⁹⁷ The United

⁹⁷ The article read:

*Delimitation of the territorial sea in straits
and off other opposite coasts*

Article 12

1. The boundary of the territorial sea between two States, the coasts of which are opposite each other at a distance less than the extent of the belts of territorial sea adjacent to the two coasts, shall be fixed by agreement between those States. Failing such agreement and unless another boundary line is justified by special circumstances, the boundary is the median line every point of which is equidistant from the nearest points on the baselines from which the breadths of the territorial seas of the two States are measured.

2. If the distance between the two States exceeds the extent of the two belts of territorial sea, the waters lying between the two belts shall form part of the high seas. Nevertheless, if, as a consequence of this delimitation, an area of the sea not more than two miles in breadth should be entirely enclosed within the territorial sea, that area may, by agreement between the coastal States, be deemed to be part of the territorial sea.

3. The first sentence of the preceding paragraph shall be applicable to cases where both coasts belong to one and the same coastal State. If, as a consequence of this delimitation, an area of the sea not more than two miles in breadth should be entirely enclosed within the territorial sea, that area may be declared by the coastal State to form part of its territorial sea.

4. The line of demarcation shall be marked on the officially recognized large-scale charts.

Report of the International Law Commission to the General Assembly, 11 GAOR Supp. (No. 9) at 15, U.N. Doc. A/3159 (1956), reprinted in

States proposed an amendment to delete the paragraphs permitting assimilation. It explained in part:

Assimilation of enclaves of any size serves no useful purpose for the coastal State or for shipping interests and could lead to abuse of the principles of the freedom of the high seas.

U.N. Doc. A/CONF.13/C.1/L.116 (Apr. 1, 1958), U.N. Conference on the Law of the Sea, 3 Official Records 243 (in Ak. Ex. 85-135).⁹⁸ Had the United States approved of assimilation in some circumstances that were perhaps not covered by the article, one would have expected the comment to be qualified to reflect the distinction.

(3) Other formulations

Although the evidence does not support a simple ten-mile rule for islands, it does show that the United States enclosed

[1956] 2 Y.B. Int'l L. Comm'n 253, 271, U.N. Doc. A/CN.4/SER.A/1956/Add.1.

⁹⁸ The paragraphs referred to, paragraphs 2 and 3 of the ILC version, *supra* note 97, were in fact dropped. As ultimately adopted in the 1958 Convention, Article 12 reads:

Article 12

1. Where the coasts of two States are opposite or adjacent to each other, neither of the two States is entitled, failing agreement between them to the contrary, to extend its territorial sea beyond the median line every point of which is equidistant from the nearest points on the baselines from which the breadth of the territorial seas of each of the two States is measured. The provisions of this paragraph shall not apply, however, where it is necessary by reason of historic title or other special circumstances to delimit the territorial seas of the two States in a way which is at variance with this provision.

2. The line of delimitation between the territorial seas of two States lying opposite to each other or adjacent to each other shall be marked on large-scale charts officially recognized by the coastal States.

waters behind islands as inland waters on some occasions. The nature of these occasions was further examined in *United States v. California*, 381 U.S. 139 (1965). The United States, in its brief in that case, described the policy in terms of the rule for straits leading to inland waters. It said, however, that the rule was circular:

(e) *Straits leading to inland waters*.—Wherever the United States has insisted on the right of innocent passage through straits, denying them the status of inland waters, the claim has rested on the character of the strait as a passageway between two areas of high seas. No such right is claimed as to a strait leading only to inland waters. Such a strait is treated as a bay. Examples of this have already been discussed, including the straits leading into the Alaskan Archipelago (*supra*, pp. 105–107), straits leading to waters between Cuba and its encircling reefs and keys (*supra*, pp. 103–105), and Chanteleur Sound (*supra*, p. 110; see also, *infra*, pp. 153–155).¹⁰⁵

¹⁰⁵ The proper application of this principle becomes a matter of some difficulty in situations where several straits lead to the same body of inland water; and a circularity is involved in situations where the “inland” status of that body depends on whether its entrances are to be subject to the ten-mile rule or to three-mile marginal belts. It may be that some of the applications have been unduly liberal—for example, in the case of Chanteleur Sound—but this need not concern us here, for, as we shall show, even accepting those liberal applications as correct, they do not reach the situation in California. See *infra*, pp. 151–155.

Brief for the United States in Answer to California's Exceptions to the Report of the Special Master, at 131 (June 1964) (Ak. Ex. 85-16), *United States v. California*, 381 U.S. 139

(1965).⁹⁹ The United States also distinguished Chandeleur and Breton Sounds from the Santa Barbara Channel in California, saying that the latter was a strait between two parts of the high seas:

The Santa Barbara Channel connects the high seas of the Pacific Ocean with other waters which we believe, and the Special Master found, are likewise high seas; and it is actually used as a route for shipping not going to or from local ports. Chandeleur and Breton Sounds, on the contrary, lead nowhere; they are simply an enclosed lagoon in a cul-de-sac of the Gulf of Mexico.

Id. at 154. The Court agreed with this distinction:

By way of analogy California directs our attention to the Breton and Chandeleur Sounds off Louisiana which the United States claims as inland waters, *United States v. Louisiana*, 363 U.S. 1, 66-67, n. 108. Each of these analogies only serves to point up the validity of the United States' argument that the Santa Barbara Channel should not be treated as a bay. The Breton Sound is a *cul de sac*. The Chandeleur Sound, if considered separately from the Breton Sound which it joins, leads only to the Breton Sound. Neither is used as a route of passage between two areas of open sea. In fact both are so shallow as to not be readily navigable.

381 U.S. at 171 (footnote omitted).

Following the Court's characterization, the United States

⁹⁹ The quoted paragraph refers to other parts of the brief discussing the Alaskan Archipelago, Cuba, and Chandeleur Sound. Except for one section of the brief that is described below, the pages cited concerned the rules for bays. They were part of a section aimed at showing that the United States had not used closing lines over ten miles long and that the materials cited by California did not show the contrary. See Ak. Ex. 85-16 at 65, 91.

now describes its pre-Convention policy for enclosing islands, as applied in the Gulf States, as "apparently reserved for situations in which the fringing islands, as compared to the water gaps between them, accounted for a very substantial portion of the closing line ultimately drawn and in which the enclosed waters were shallow and constituted a cul-de-sac." USB 53.¹⁰⁰ The United States gave a similar explanation before Special Master Hoffman in the *Massachusetts Boundary Case*:

[T]he whole thrust of the State Department letters of 1951 and 1952 . . . was to assert that a strait between the mainland and offlying islands should *not* be deemed inland water, *regardless of its width*, unless it is "merely a channel of communication to an inland sea." . . . So understood, the "10 mile rule" to which the Court adverts [in the *Alabama and Mississippi Boundary Case*] was limited to *cul de sac* situations—which would include Mississippi Sound and Chandeleur and Breton Sounds . . . but not Nantucket and Vineyard Sounds.

Supplemental Post Trial Brief of the United States (Before the Special Master) at 4 (1985) (Ak. Ex. 85-333), *United States v. Maine*, 475 U.S. 89 (1986) (Massachusetts Boundary Case). See also Tr. 3573-75.

These statements, from 1964 and later, cast some additional light on the earlier rule for straits leading to an inland sea. First, there is no attempt to give the rule a noncircular

¹⁰⁰ To similar effect is USB 9 n.3: "[T]he only ten-mile fringing island inland water rule ever actually followed by the United States was a very limited one, restricted to dead-end situations involving shallow waters that are substantially sheltered behind a land rampart with relatively minor water gaps." The idea that the water gaps must be relatively small comes from Boggs's 1950 memorandum on the closing of Chandeleur Sound. See Ak. Ex. 85-85, U.S. Ex. 85-400, discussed *supra* pages 85, 128.

reading. Rather, the circularity implicit in Shalowitz's 1962 account, *supra* pages 91-93, is now acknowledged openly. Second, the situations where the rule could be applied are now characterized by the United States as involving cul-de-sacs. This is a reasonable interpretation of the rule, though not a conclusive or authoritative interpretation. If an area partly enclosed by islands was to be treated as inland waters on the ground that it formed a strait leading only to an inland sea, then so should a similar area that led nowhere at all, i.e., a cul-de-sac. The extreme case of a cul-de-sac, of course, would be a bay.

The question arises how the rule for straits to an inland sea, appropriately interpreted, would apply to the disputed areas on Alaska's coast. The United States argues, however, that this question need not be considered at all. Section e treats the United States' argument, and then section f returns to the application of the rule.

e. *The 1958 Convention*

The Convention on the Territorial Sea and the Contiguous Zone was opened for signature on April 29, 1958, and was signed on behalf of the United States on September 15, 1958, before Alaska's statehood. 516 U.N.T.S. 205, 274. The United States argues that, whatever its pre-Convention policy for waters behind fringing islands, it moved to the Convention rules immediately upon signing. Furthermore, the United States says, it did not adopt straight baselines under Article 4 of the Convention. If this is correct, the United States' present policy came into effect in 1958, and the disputed areas were not inland waters at or after Alaska's statehood.

To evaluate this argument, one must recall the position of the United States, as of 1958, in the Gulf States litigation. The United States continued to concede inland-water status

to Chandeleur, Breton, and Mississippi Sounds, but the theory was that it was following the delimitation policy as of enactment of the Submerged Lands Act in 1953. *See supra* page 114. It would have been possible, without inconsistency, to hold to the 1953 position for purposes of the Submerged Lands Act, while moving to the Convention's rules for purposes of current foreign policy.

Whether the United States actually did move to the Convention's rules in 1958 is another question. The Court found in the *Alabama and Mississippi Boundary Case* that the United States adhered to its pre-Convention policy for offshore islands until the Convention was ratified in 1961. *See supra* section F(1). In the later *Massachusetts Boundary Case*, the United States disputed the Court's statement of the content of the policy, but it took no issue with the point about when the policy was changed.¹⁰¹ The exact date gains new importance in the present case, of course, because of the timing of Alaska's admission to the Union.

In the present proceeding the United States cites two items to show that it changed to the Convention earlier than previously supposed. In August 1958, the Assistant Legal Adviser in the State Department, Mr. Yingling, is reported to

¹⁰¹ As noted in the last section, the United States wrote in a 1985 brief to the Special Master that, under the State Department letters of 1951 and 1952, "a strait between the mainland and offlying islands should *not* be deemed inland water, *regardless of its width*, unless it is 'merely a channel of communication to an inland sea.' " Then it added:

So far as we are aware, no general rule for treating waters behind a fringe of islands as inland was proposed by an American official until 1951, and even then somewhat backhandedly, as we have just noted. The position therefore survived barely a decade, the United States having ratified the Convention on the Territorial Sea in 1961

Supplemental Post Trial Brief of the United States (Before the Special Master) at 4-5 (1985) (Ak. Ex. 85-333), *United States v. Maine*, 475 U.S. 89 (1986) (Massachusetts Boundary Case).

have questioned the continued concession of Chandeleur Sound. Ak. Ex. 85-86, U.S. Ex. 85-404, *infra* note 102. In June 1959, the State Department Geographer, Mr. Percy, published an article reporting that he had plotted the territorial sea of the United States using the principles of the 1958 Convention. G. Etzel Percy, *Measurement of the U.S. Territorial Sea*, Dep't St. Bull., June 29, 1959, at 963, 964 (Ak. Ex. 85-138); *id.*, reprinted as Dep't of State Pub. 6879, General Foreign Policy Series 139, at 2 (U.S. Ex. 85-231).

I do not find either event persuasive as to the precise date from which the United States followed the Convention. The Percy article is an exposition, not a policy statement. The Yingling question was answered in the negative. The indications are that Mr. Percy and Mr. Yingling, for the State Department, were at odds for a time with the Justice Department personnel handling *Louisiana*. That falls short of showing that the State Department, in its foreign-policy interpretation of the Louisiana coastline, had definitely diverged from the Justice Department's domestic interpretation.¹⁰² It remains necessary, then, to consider how the

¹⁰² This judgment rests, as does the argument of the United States, on a letter dated February 29, 1960, from Solicitor General Rankin to Admiral Karo, director of the Coast and Geodetic Survey. Ak. Ex. 85-86, U.S. Ex. 85-404. The letter discusses Percy's maps as well as Yingling's question, and it is the best available source for some other aspects of the history as well:

It has come to my attention that Dr. G. Etzel Percy, Geographer of the Department of State, has recently prepared a series of maps intended to show the three-mile limit of the United States, and that the Coast and Geodetic Survey is at present reproducing these maps for official use and public distribution. While the project is undoubtedly a desirable one, the line as drawn by Dr. Percy is inconsistent in some respects with the position already taken by this Department, on the advice of the Department of State, in litigation now pending before the Supreme Court.

One of the chief inconsistencies concerns Chandeleur Sound, Lou-

United States' pre-Convention policy for waters inside near-shore islands would have applied in Alaska.

isiana. On July 6, 1950, in response to a specific inquiry in connection with the case of *United States v. Louisiana*, 339 U.S. 699, the State Department advised us that Chandeleur Sound should be considered inland water. On October 26, 1950, in the same connection, Dr. Boggs, then Geographer of the State Department, joined with representatives of the Department of the Interior and this Department in describing, on that basis, a line, (commonly referred to as the "Chapman Line") to represent the official position of the United States as to the coast line of Louisiana, that is, the base line for the three-mile belt. We followed this position in our brief in support of our motion for judgment on the amended complaint in the related case of *United States v. Louisiana et al.*, No. 11, Original, October Term, 1957, at page 177; a draft of that brief was submitted to the State Department in May 1958, before it was filed, and no question was raised on this point. The position was repeated at pages 43-44 of our reply brief in the same case, a draft of which was likewise submitted to the State Department in August 1958. At that time, Mr. Yingling, Assistant Legal Adviser, did raise a question regarding Chandeleur Sound; but at a conference between him, Dr. Percy, and John F. Davis and George S. Swarth of this Department, it was agreed that we should continue to concede that the Sound is inland water. Because of this concession, it was unnecessary for Louisiana to press certain aspects of its argument as it might otherwise have wished to do.

The case of *United States v. Louisiana, et al.*, was argued last October and is now under submission. The status of Chandeleur Sound has been only indirectly involved at the present stage of the case, but will be directly involved at a later stage, when it may be necessary to define our entire coast line on the Gulf of Mexico. I am sure you can appreciate the undesirability of having it appear that the Government is attempting to escape from the concession that it has made to the Court. While Dr. Percy's maps represent only his personal views and not the official position of the State Department, significance is bound to be attributed to their publication and use by the Coast and Geodetic Survey. It seems quite possible that examination will disclose other problems similar to that of Chandeleur Sound. We have taken this matter up with Mr. Yingling, and he agrees that it is important that the Government adopt a uniform position in these mat-

f. The application of pre-Convention policy in Alaska

I found earlier that, before the Convention, the United States did sometimes enclose waters behind coastal islands as inland waters. Although the circumstances leading to this treatment were not spelled out precisely, it may be that some of the waters behind coastal islands in the Arctic would have been deemed inland waters under any version of the policy. The likeliest cases, however, are not in issue here. Where the islands are close enough together and close enough to shore, the intervening waters are included in the Submerged Lands Act grant to the State, even if they are not inland waters, as part of the three-mile belt along the mainland and around each island. Thus, along the entire coasts of the National Petroleum Reserve-Alaska and the Arctic National Wildlife Refuge, the three-mile belts include all the waters landward of islands.¹⁰³

Where the water gaps are short enough, the outer limit of the Submerged Lands Act grant is also unaffected by the status of the waters behind islands. That is, even if closing lines are drawn across the gaps, the three-mile belt measured seaward from the closing line often includes no more submerged land than a belt measured strictly from low-water mark. Thus, in the National Petroleum Reserve-Alaska, only one of Alaska's proposed closing lines would affect the seaward limit of the three-mile belt.¹⁰⁴ In the Arctic Na-

ters. We intend to proceed as rapidly as possible to work this out with the Department of State. In the mean time, I should appreciate your arranging so that these maps will not be distributed until the position is clarified.

¹⁰³ As to whether any of these submerged lands were withheld from Alaska on other grounds, see *infra* sections VIII and IX.

¹⁰⁴ This line, roughly four miles long, would be drawn across the Ekilukruak Entrance to Elson Lagoon, joining the Tapkaluk Islands to Cooper Island. See figure 1.1; Ak. Ex. 85-920G (NOS chart 16081); AB 24-26.

tional Wildlife Refuge, apparently none of the proposed closing lines is long enough to add any area to the three-mile belt.¹⁰⁵

The central controversy, of course, concerns the submerged lands of the leased area, in particular at Stefansson Sound. Here there are substantial areas that are landward of the islands but more than three miles from any upland. There are also numerous proposed closing lines between islands that are long enough to affect the seaward limit of the three-mile belt. See figure 3.4; Ak. Exs. 85-920L to -920P (NOS charts 16063, 16062, 16061, 16046, 16045); Tr. 2904-14; AB 26-30.

The same geographical features that give rise to the controversy at Stefansson Sound make it at most a borderline case for treatment as inland waters under the United States' pre-Convention policy. Alaska has asserted that Stefansson Sound is a cul-de-sac, AB 98-99, but it has not seriously argued the point. Rather, it insists on the unqualified version of the ten-mile rule for islands. ARB 34 & n.11; Tr. 3588. Such evidence as the record contains indicates that the sound should not be treated as a cul-de-sac in the sense that the Court so described Chandeleur and Breton Sounds. As already noted, Chandeleur and Breton Sounds are more fully enclosed than Stefansson Sound, where the barrier islands cover only about one-third of the total length. See *supra* page 87 n.45. In addition, the *Coast Pilot* describes Stefansson Sound as a useful passage for navigation: "Vessels fol-

¹⁰⁵ The coast of the Refuge extends between Brownlow Point and the Canadian border and is shown, with Alaska's proposed closing lines, on Ak. Exs. 85-920P through -920T (NOS charts 16045, 16044, 16043, 16042, and 16041). Alaska's witness, Dr. Prescott, testified that none of the lines affected the three-mile limit in the Reserve area. Tr. 2913-17. Alaska says in its brief that "one or two" of the lines do "have an appreciable effect on the outer limit" of the three mile-belt, AB 30, but it gives no particulars.

lowing the coast may avoid the heavy ice that is nearly always present off the barrier islands by passing inside the islands by way of one of the deeper entrances."¹⁰⁶ Thus, the sound would probably have been classified as a strait "connect[ing] two seas having the character of high seas"¹⁰⁷ or a strait "which form[s] a passage between two parts of the high sea"¹⁰⁸—not as a body that might be inland waters under the rules for bays.

In conclusion, I cannot regard it as established that the United States would have treated the disputed areas as inland waters at the time of Alaska's statehood. No occasion had

¹⁰⁶ National Ocean Survey, U.S. Dep't of Commerce, 9 *United States Coast Pilot* 345 (9th ed. 1979) (Ak. Ex. 136). This publication contains the following description of the sound:

From the Return Islands to Brownlow Point, barrier islands parallel the coast and are separated from it by *Stefansson Sound*, an extensive lagoon. The mainland is low tundra with very little relief except for three prominent mounds W and SW of Tigvariak Island. The mainland shore consists of low bluffs, up to 35 feet in height, cut by river flood plains and deltas. The barrier islands are low sand and gravel reefs less than 8 feet in elevation; the larger islands have some sparse vegetation. Between the islands are many shoals and bars that are awash. The lagoon between the island and the mainland has depths of as much as 30 feet but also has many areas too shallow for navigation by small boats. The lagoon is 2 to 10 miles wide and extends in a continuous line from the Return Islands to Brownlow Point. Vessels following the coast may avoid the heavy ice that is nearly always present off the barrier islands by passing inside the islands by way of one of the deeper entrances. Ice frequently blocks these entrances, but passage usually can be made through leads.

Id. See also Tr. 3064–65, 3094–95, 3109–10.

¹⁰⁷ The phrase comes from the 1951 State Department letter, quoted *supra* page 102 n.76, and also from the United States' proposals at the 1930 Hague conference, quoted *supra* page 74.

¹⁰⁸ The phrase comes from the report of the Second Subcommittee at the Hague Conference, quoted *supra* page 75 n.34.

arisen that required the United States to take a position on their status. No actual determination had been made. The principles that would govern the determination were vague and, as I shall discuss below, perhaps discretionary. The Court said in its *California* decision in 1965, "Before today's decision no one could say with assurance where lay the line of inland waters as contemplated by the [Submerged Lands] Act; hence there could have been no tenable reliance on any particular line." 381 U.S. at 166. That includes the line of inland waters off Alaska's Arctic coast.

6. Poststatehood developments

Even though the disputed areas had not been established as inland waters by Alaska's statehood, it is conceivable that they became established as inland waters thereafter. Alaska does not suggest that the waters achieved historic bay status, but it does argue that something less than historic bay status is required to make submerged lands part of "a State's recognized territory." Such lands would then become subject to the Court's statement that "a contraction of a State's recognized territory imposed by the Federal Government in the name of foreign policy would be highly questionable." *United States v. California*, 381 U.S. 139, 168 (1965).

In the *Louisiana Boundary Case* in 1969, the Court sketched a possible example of such a contraction. If the United States had a "firm and continuing international policy to enclose inland waters within island fringes," and if this was "the consistent official international stance of the Government, it arguably could not abandon that stance solely to gain advantage in a lawsuit to the detriment of Louisiana." 394 U.S. at 73 n.97.

Alaska offers two main kinds of evidence from the post-statehood period as tending to show that the United States had a policy of the sort referred to in the *Louisiana Bound-*

ary Case. One line of evidence concerns the further development of the asserted ten-mile rule for islands. The other concerns straight baselines under Article 4 of the 1958 Convention.

a. *The ten-mile rule*

(1) *The Louisiana case, 1960-1961*

On May 31, 1960, the Court handed down its decisions concerning the width of the belt granted by the Submerged Lands Act to each of the Gulf States. *United States v. Louisiana*, 363 U.S. 1 (1960); *United States v. Florida*, 363 U.S. 121 (1960). For Louisiana, the Court found that the belt was three miles wide, not three leagues. The Court acknowledged the United States' concession that the belt would be measured from fringing islands rather than the mainland shore, but it also remarked that it did not intend thereby "to settle the location of the coastline of Louisiana or that of any other State." 363 U.S. at 66 n.108 (quoted more fully, *supra* page 113). The final decree was entered on December 12, 1960. *United States v. Louisiana*, 364 U.S. 502 (1960).

After the 1960 decision, the United States did undertake to settle the location of the Louisiana coastline. A joint federal-state survey of the low-water line—a five-year project—was completed in 1961. See Ak. Ex. 85-170 (the report of the federal-state committee, dated December 20, 1961, and related documents); 1 Shalowitz, *supra* page 88, at 173-80. As to the legal principles to be applied to the low-water line, there were consultations during 1961 that involved the Departments of Justice, State, and Interior and the Coast and Geodetic Survey. It was during these consultations that a ten-mile rule for islands was first clearly stated.

The statement appears in nearly identical letters of early March 1961 from Solicitor General Archibald Cox to the

State Department and the Coast and Geodetic Survey.¹⁰⁹ Cox wrote that the Justice Department was now faced with the problem of giving precise application to the 1960 decision and that, unless agreement could be reached with the States, Justice intended to seek supplemental decrees fixing the coastline. It would begin with Louisiana because there was a great deal of present production there. Cox continued by describing the work done so far on the coastline description, suggesting some principles, raising some questions, and asking for comments:

As a basis for discussion, we have asked the Interior Department to furnish a proposed description of the coast line of Louisiana, based on the joint survey which it has been making with the State. I enclose a copy of the description prepared, in response to that request, by Mr. Donald B. Clement of the Division of Cadastral Engineering, Bureau of Land Management, to which I have added paragraph numbers for convenience of reference. I also enclose a memorandum written by Mr. George Swarth of this Department, commenting on Mr. Clement's proposed description, comparing it with the earlier description known as the Chapman Line and with maps prepared last year by Dr. G. Etzel Percy, the Geographer of the Department of State, and raising certain questions for further consideration.

In supporting our position as to the location of the coast line, it will be necessary to formulate the principles

¹⁰⁹ Letter from Cox to Rear Admiral H. Arnold Karo, Director, Coast and Geodetic Survey (Mar. 6, 1961) (with enclosures) (U.S. Ex. 85-407, Ak. Ex. 85-145); letter from Cox to Abram J. Chayes, Legal Adviser, Department of State (Mar. 3, 1961) (without enclosures) (U.S. Ex. 85-406, Ak. Ex. 85-159). Related exhibits are U.S. Ex. 85-405 (extra copy of enclosures, with additional diagrams) and Ak. Ex. 85-158 (extra copy of enclosures, with additional diagrams and some extraneous material).

on which the description has been developed. I would like to submit for your consideration some statements of principles, derived from various sources, including the letter of November 13, 1951, from Acting Secretary of State James E. Webb to Attorney General J. Howard McGrath and the 1958 Convention on the Territorial Sea and Contiguous Zone. With reference to the 1958 Convention, I should explain that we are not now following its provision recognizing bays as wide as 24 miles at the mouth, because it is our understanding that this rule is regarded as a departure from existing law, and that although ratified by the Senate on May 26, 1960, the Convention will not become operative until 30 days after it has been ratified by 22 nations. Even when it does become operative, we believe that the legislative character of this provision will prevent its having retroactive effect in the pending litigation. Thus a determination based on present principles will still be needed for the purpose of apportioning funds derived from the submerged lands before the effective date of the Convention.

The principles that I suggest are as follows:

....

(g) Waters enclosed between the mainland and off-lying islands which are so closely grouped that no entrance exceeds ten miles in width shall be considered inland waters.

....

There are of course many questions raised by the foregoing propositions or by matters not covered by them. In particular, I should be glad to have your views on the following:

....

(b) Under what circumstances should the coast line depart from the mainland to embrace offshore islands?

....

You will of course recognize that to some extent these questions overlap or represent different aspects of the same problem. No doubt, also, additional points will occur to you which I have not raised.

When you have had an opportunity to consider these various matters, I shall be glad to hear your views on them, or to arrange for a conference between representatives of the State and Interior departments, the Coast and Geodetic Survey, and this Department, if it seems that such a conference would be helpful. . . . I am hopeful that we may be able to present something for the Court to act on before the June recess.

Ak. Ex. 85-407, *supra* note 109.

The Coast and Geodetic Survey replied to Cox's letter on April 18, 1961. The reply consisted of a short letter from Admiral Karo, the Director, and a long memorandum by Mr. Shalowitz. Ak. Exs. 85-149, -150, and -160. Shalowitz divided his memorandum into three parts. The response to Cox's proposed principle g, the ten-mile rule for islands, was in part I:

This principle is concurred in and is in conformity with the principle recommended in Part II, Item (b). It would probably be difficult to make this rule more specific because of the great variety of coastal configurations that might be encountered. Each case would call for a consideration on the merits and an equitable solution arrived at.

Ak. Ex. 85-150 at 4. Part II, item b, was the response to Cox's question b, on the treatment of offshore islands (*supra* page 144):

The coast line should not depart from the mainland to embrace offshore islands, except where such islands either form a portico to the mainland and are so situated that the waters between them and the mainland are suffi-

ciently enclosed to constitute inland waters, or they form an integral part of a land form.

Ak. Ex. 85-150 at 7.¹¹⁰ Finally, part III of the memorandum

¹¹⁰ Shalowitz included several paragraphs of commentary on this recommendation, as follows:

(1) The first part of the recommendation is based on the position of the Government as enunciated in the letter of November 13, 1951 (par. (e)), from Acting Secretary of State Webb to Attorney General McGrath. This was the position taken by the Department of Justice in the *California* case and which the Special Master upheld. Under this part of the recommendation, each island, whether isolated or part of a group, would carry its own territorial belt. This is readily understood and easy to apply, and no additional rules are necessary, such as the ratio of the area of an island to the water area between it and the mainland. Where an island is within the territorial sea, drawing the coast line so as to embrace the island would have little effect on the extent of the intervening submerged lands. For any other situation, there is greater reason why they should be excluded from the coast line.

(2) The second part of the recommendation (the exceptional part) deals with situations characteristic of the Louisiana coast and did not arise in the *California* case. It was the basis for drawing the Chapman Line and is in conformity with the concession made by the Government in its Brief in the *Louisiana* case (p. 177).

(3) When the 1958 Geneva Convention on the Territorial Sea and the Contiguous Zone becomes operative and it becomes permissible to take coastal islands into account for the purpose of drawing straight baselines between appropriate points but which "must not depart to any appreciable extent from the general direction of the coast," the difficulty of laying down specific rules for applying the general criteria of the convention should be recognized. The ultimate solution may lie in studying each case on the basis of the general criteria, but using the skjaergaard coast of Norway as the limiting condition of conformity to the criteria.

(4) Insofar as determining which islands form part of a land form and which do not, no precise standard is possible. Each case must be considered within the framework of the principal rule. One indication of homogeneity might be a common low-water line.

Ak. Ex. 85-150 at 7-8.

contained Shalowitz's comments on the enclosures to Cox's letter, namely, the Interior Department's draft of a boundary description and the Justice Department's comments on the draft. One of Shalowitz's comments is notable for providing an example of islands which would satisfy a simple ten-mile rule but which he considered to be neither a portico to the mainland nor part of a land form:

A modification of the BLM description is recommended so as to include in the coast line only the unnamed island nearest the easterly headland of Redfish Bay. This follows the Chapman Line and is in conformity with the principle established in Part II, Item (b). The comment by Mr. Swarth that if any of the islands are to be included then perhaps all should be included, does not necessarily follow when considered in the light of the Commentary to Item (b) of Part II.

Id. at 28 ("call 66"). See also U.S. Ex. 85-416 (map showing Redfish Bay and the islands referred to). Thus, even Shalowitz did not apply an entirely unqualified ten-mile rule.¹¹¹

The discussion of the description of the Louisiana coastline continued into the summer of 1961. Representatives of all the concerned agencies met on April 28;¹¹² a revised description was circulated on May 2;¹¹³ the agencies com-

¹¹¹ In his 1962 book Shalowitz described his "portico" recommendation as an "amplification of the [ten-mile rule] . . . recommended so that it would be of general application." 1 Shalowitz, *supra* page 88, at 161. The notion of a portico was elaborated only by a figure, which could equally well be described as showing a fringe of islands. *Id.* at 162.

¹¹² See Cox's letters of May 2, 1961, *infra* note 113.

¹¹³ Letter from Solicitor General Cox to Admiral Karo (May 2, 1961) (including revised description) (Ak. Ex. 85-151); Letter from Cox to Legal Adviser Abram Chayes (May 2, 1961) (Ak. Ex. 85-162 [the letter] and 85-161 [the description]).

mented again;¹¹⁴ yet another revision was sent out on June 29;¹¹⁵ the State Department and the Coast and Geodetic Survey sent their final comments, generally agreeing to the description, early in July.¹¹⁶ The final version of the description continued to close Chandeleur and Breton Sounds. Ak. Ex. 85-153, *supra* note 115, paras. 83-93. It also listed five places along the coast (including Redfish Bay, mentioned above) where islands were treated individually, the coastline being "the ordinary low water line around each island." *Id.*, paras. 94-98.

During these discussions, the State Department took the view that the coastline description should conform to its international policy. It said in connection with another point (the treatment of jetties):

While the sovereign rights in the submerged lands involved in this litigation undoubtedly belong to the United States under international law, and while the division of those rights between the Federal and State Governments is a matter of domestic law, it is the Department's view that questions related thereto should be resolved consis-

¹¹⁴ Letter from Admiral Karo to Solicitor General Cox (May 8, 1961) (Ak. Ex. 85-152); memorandum from G. Etzel Percy to Raymund T. Yingling (May 18, 1961) (Ak. Ex. 85-163, U.S. Ex. 85-410); letter from Acting Legal Adviser Leonard C. Meeker to Solicitor General Cox (May 22, 1961) (Ak. Ex. 85-165, item 2). See also memorandum from Frank J. Barry, Solicitor, Department of the Interior, to Director, Bureau of Land Management (May 16, 1961) (U.S. Ex. 85-409) (requesting review of the May 2 description).

¹¹⁵ Letter from Solicitor General Cox to Admiral Karo (June 29, 1961) (Ak. Ex. 85-153) (including description); letter from Cox to Legal Adviser Chayes (June 29, 1961) (Ak. Ex. 85-157, U.S. Ex. 85-411) (without description). The date of the Cox-Chayes letter is not legible on the letter itself but is taken from Chayes's reply, *infra* note 116.

¹¹⁶ Letter from Charles Pierce, Deputy Director, Coast and Geodetic Survey, to Solicitor General Cox (July 7, 1961) (Ak. Ex. 85-154); letter from Legal Adviser Chayes to Cox (July 5, 1961) (Ak. Ex. 85-164).

tently with international law, and with policies of the United States Government in the international field.

Letter from Acting Legal Adviser Leonard Meeker to Solicitor General Cox (May 22, 1961), *supra* note 114, at 2. Dr. Percy, in a memorandum on the description circulated May 2, wrote, "Extension of baseline along islands to include Chandeleur Sound has been questioned." Ak. Ex. 85-163, U.S. Ex. 85-410, *supra* note 114.¹¹⁷ Meeker enclosed the memorandum in his May 22 letter to Cox. Cox replied, however, "[T]his was originally done on the advice of the State Department, and we feel we are now committed to it in this litigation." Letter from Cox to Legal Adviser Abram Chayes (June 29, 1961), *supra* note 115.¹¹⁸

¹¹⁷ For earlier questionings of the treatment of Chandeleur Sound, in 1958 and 1960, see *supra* page 136 n.102.

¹¹⁸ To similar effect were the comments prepared by Mr. Swarth of the Justice Department and enclosed with Cox's letter of March 1961, *supra* note 109. Mr. Swarth wrote:

The Chapman Line continued along the delta, crossing Grand Bay to the north headland, then to the south tip of Bird Island, along the east side of Bird Island, and to the west tip of Breton Island. The east headland of Main Pass has now extended northward so that the direct crossing to Breton Island is about 6 1/2 miles. Dr. Percy does not cross at all, but continues along the delta and St. Bernard Peninsula, drawing a separate line around the Chandeleur Islands and the other screening islands. He thus leaves Chandeleur Sound as high seas, open at both ends. We are no longer in a position to accept Dr. Percy's view, since we conceded to the Supreme Court (on the advice of the State Department) that Chandeleur Sound is inland water (U.S. Brief 177).

U.S. Ex. 85-407, Ak. Ex. 85-145, *supra* note 109, enclosure 2, at 7, para. 77. Shalowitz seems to have taken the Justice Department's commitment to be even broader. In his April 18 memorandum he wrote, "[T]he Chapman Line delineation forecloses the use of a more restrictive line in areas where no changes have occurred since the line was drawn . . ." Ak. Ex. 85-150, *supra* page 145, at 20 (discussing Caillou Bay).

I do not find that these events of 1961, considered either alone or as a further development of the earlier policy, establish a simple ten-mile rule for enclosing waters behind islands as inland waters. The description did not follow such a rule consistently, and the qualifying condition, that the islands must "form a portico to the mainland," was left entirely metaphorical.¹¹⁹

Even more importantly, where the description did enclose waters behind fringing islands, as at Chandeleur Sound, it still did not purport to follow a rule that would be generally applicable in the future. It was recognized that the Convention provided rules different from those used for Louisiana. Furthermore, President Kennedy had ratified the Convention on March 24, 1961—between the dates of Cox's original letters and of Shalowitz's reply. Both Cox and Shalowitz evidently thought that the significant event would be the Convention's entry into force, not its ratification, but they recognized that the Convention would become the governing document for future foreign policy.

Accordingly, the treatment of Chandeleur and Breton Sounds in 1961 cannot be interpreted as expressing, in the language of the *Louisiana Boundary Case*, a "firm and continuing international policy to enclose inland waters within island fringes." 394 U.S. at 73 n.97. Rather, the 1961 line is best understood as it was explained at the time: as adherence to an earlier commitment. The ten-mile rule and portico principle, offered in justification of the treatment, were a further development of pre-Convention policy, which was then thought to govern the interpretation of the Submerged Lands Act. As pre-Convention policy applied after the Convention had been ratified, the principles behind the 1961 line

¹¹⁹ The phrase "portico to the mainland" comes from *The Anna*, 165 Eng. Rep. 809, 815 (Adm. 1805), but that case does not help to explain the metaphor.

in Louisiana cannot be understood as general enough to support a claim in an entirely different location, such as Alaska.

Indeed, the Court has held that the 1961 line and its predecessors did not bind the United States even as against Louisiana. In the later *Louisiana Boundary Case*, 394 U.S. 11 (1969), the Court rejected an argument that the United States was estopped from changing its position.¹²⁰ One area affected by this ruling was Caillou Bay, which had been enclosed as inland waters under the Chapman Line and the 1961 line.¹²¹ Ultimately it was found to be not a true bay but only an area behind an island fringe and, as such, not inland waters for purposes of the Convention or the Submerged Lands Act.¹²² A fortiori, the principles used in drawing the

¹²⁰ In discussing "areas between the mainland and fringes or chains of islands along the coast," 394 U.S. at 66-67, the Court said:

Louisiana . . . contends that the United States is estopped from denying the "inland water" status of such areas by its concession in earlier stages of this litigation that the areas between the mainland and all the offshore islands were inland waters. We took note of this concession in *United States v. Louisiana*, 363 U.S. 1, 67 n.108

. . . .

As we stressed in that case, this Court has placed no imprimatur on that position. Nor do we think the United States is bound by it. Louisiana has not relied to its detriment on the concession, which appears to have been made primarily for purposes of reaching agreement on the leasing of the submerged lands pending a final ruling on their ownership. The Interim Agreement of 1956 specifically recognized that neither party would be bound by its positions

394 U.S. at 73 n.97.

¹²¹ For the treatment of Caillou Bay up to 1961, see the enclosures to Cox's letter of March 1961, *supra* note 109 (specifically paragraphs 19-21 of Mr. Clement's draft description and of Mr. Swarth's comments); Mr. Shalowitz's comments of April 1961, *supra* page 145, at 19-20; and the description of June 29, 1961, *supra* note 115, at paragraphs 19-21.

¹²² See 394 U.S. at 66 n.87 (noting the issue as to the proper treatment of Caillou Bay); *United States v. Louisiana (Louisiana Boundary Case)*,

1961 Louisiana coastline cannot have made Stefansson Sound irrevocably inland waters.

(2) *The California case, 1963-1965*

Despite the extensive work during 1961 on the Louisiana coastline description, it was not until 1965 that the Justice Department moved for a first supplemental decree fixing parts of the offshore rights in Louisiana. Meanwhile, the *California* litigation came back to the fore.

The case had been inactive for several years. The Special Master had made his report in 1952, agreeing with the United States that waters landward of offshore islands in California were not inland waters. *See supra* section F(4)(d). Both parties filed exceptions to the report, but in May 1953, before any further action was taken, Congress passed the Submerged Lands Act. The Act gave California the submerged lands out to three miles offshore, and this was enough to resolve the practical questions between the parties for the time being. *See United States v. California*, 381 U.S. 139, 142-149 (1965).

By 1963, with improved drilling technology, it became important to determine the full extent of the Submerged Lands Act grant to California. The Court granted leave for the United States to file a supplemental complaint, and it authorized both parties to file new exceptions to the 1952 Master's report. 375 U.S. 927 (Dec. 2, 1963).

A significant part of the dispute in 1963 concerned the standards to be applied in interpreting the term "inland

Report of Special Master Walter P. Armstrong, Jr., at 49-52 (1974) (U.S. Ex. 85-415), reprinted in Reed et al., *supra* note 8, at 181, and in 59 I.L.R. 249 (finding Caillou Bay not a bay and so not inland water); *United States v. Louisiana (Louisiana Boundary Case)*, 420 U.S. 529 (1975) (accepting the Master's report).

waters" in the Submerged Lands Act. Before the Act, Special Master Davis had taken the relevant definition to be that used by the United States in the conduct of its foreign affairs as of October 27, 1947, the date of the first *California* decree. *See* 381 U.S. at 143-44, 163. The United States argued that the Submerged Lands Act used "inland waters" in almost the same sense, the only difference being that the relevant date was now May 22, 1953, when the Submerged Lands Act was approved. *See id.* at 149, 164. California argued that the Act used "inland waters" in an entirely different sense. *Id.* at 149. It also argued that if international law principles did apply, they should be the principles of the Convention. 1 Brief in Support of Exceptions of the State of California to the Report of the Special Master Dated October 14, 1952, Pursuant to Court Order of December 2, 1963, at 70, *United States v. California*, 381 U.S. 139 (1965).

The Court agreed with California's secondary contention, that the Convention's definition of inland waters should be applied. It noted that the Convention had gone into force on September 10, 1964; it characterized the Convention as providing the "best and most workable definitions available"; and it adopted these definitions for purposes of the Submerged Lands Act. *United States v. California*, 381 U.S. 139, 164-65 (1965) (quoted *supra* page 17).

The Court then turned to subsidiary issues, *id.* at 167. It rejected California's contention that it was entitled to use straight baselines around its offshore islands under Article 4 of the Convention. *Id.* at 167-68; *see supra* section E(1). Next the Court went on to Article 7, which increased the maximum bay closing line to twenty-four miles. After dealing with bays proper, 381 U.S. at 169-70, it considered an area inside offshore islands that California said formed a "fictitious bay." This area, the Santa Barbara Channel, would not have satisfied a ten-mile rule for islands, but it

would have satisfied a 24-mile rule,¹²³ and this was the gist of the fictitious bay claim.¹²⁴

The Court found it unnecessary to decide whether international law recognized a principle of fictitious bays. 381 U.S. at 170 n.38. It also found it unnecessary to decide whether some other principle precluded the fictitious bay claim.¹²⁵ The controlling point was that, as with straight baselines, the United States had discretion not to make such a claim:

The United States has not in the past claimed the Santa Barbara Channel as inland water and opposes any such claim now. The channel has not been regarded as a bay either historically or geographically. In these circumstances, as with the drawing of straight base lines, we hold that if the United States does not choose to employ the concept of a "fictitious bay" in order to extend our international boundaries around the islands framing Santa Barbara Channel, it cannot be forced to do so by California.

Id. at 172. The Court distinguished Chandealeur and Breton

¹²³ The channel was 11 miles wide at one end and 21 miles at the other. 381 U.S. at 170 n.38. The distances between islands were smaller. See map, 381 U.S. facing page 213 (Black, J., dissenting).

¹²⁴ "California asserts that the Santa Barbara Channel may be considered a 'fictitious bay' because the openings at both ends of the channel and between the islands are each less than 24 miles." 381 U.S. at 170 (footnote omitted).

For background on the concept of a fictitious bay, see *id.* at 170 n.38. See also U.S. Ex. 85-228 (the International Law Commission documents in which the concept was first proposed in 1953).

¹²⁵ The principle in question was that "a country could not claim a strait as inland water if, in its natural state, it served as a useful route for international passage." 381 U.S. at 172, citing the *Corfu Channel Case*, 1949 I.C.J. Rep. 4. The application of the principle was uncertain because the evidence showed that the Santa Barbara Channel was useful for navigation but not whether the ships using it were international. 381 U.S. at 171.

Sounds both geographically and as areas that the United States did claim as inland waters. *Id.* at 171 (quoted *supra* page 132).

Alaska suggests that "had the water distances [in *California*] been less than 10 miles, it is virtually certain that California would have prevailed . . ." AB 175 n.38. I disagree. The Court's reasoning in *California* did not depend exclusively on the geographical differences between the Santa Barbara Channel and the Louisiana sounds. It depended also, at least as importantly, on whether an inland-water claim to a particular area had in fact been made. The United States has not made such a particularized claim to Stefansson Sound or the other disputed areas in the Arctic.

(3) *The Louisiana case, 1965*

Although the Court ruled in *California* that "inland waters" in the Submerged Lands Act should be interpreted according to the Convention, Alaska argues that the United States continued to follow a ten-mile rule for islands even after that decision. In support of this assertion, Alaska refers to a motion filed in *Louisiana* in November 1965, six months after the *California* decision. Motion by the United States for Entry of a Supplemental Decree (No. 1), Proposed Supplemental Decree, and Memorandum in Support of Motion (filed Nov. 23, 1965) (Ak. Ex. 85-167). The motion was granted and the decree entered on December 13, 1965. *United States v. Louisiana*, 382 U.S. 288 (1965). See also Ak. Ex. 85-189 (preliminary correspondence).

The 1965 motion and decree reflected changes in the positions of both parties since the interim operating agreement of 1956 (*supra* section F(5)(a)). On the seaward side of the areas covered by the 1956 agreement, Louisiana's claims had been reduced by the Court's 1960 ruling that the State did not receive a three-league grant. On the landward side, the United States had recognized that certain additional areas

were included in the Submerged Lands Act grant to Louisiana. Some of the additions resulted from applying the Convention, as required by *California*: new rules affected the treatment of bays, jetties, and low-tide elevations. Other additions resulted from recent surveys of the low-water line. The object of the motion was to establish the exclusive rights as to these areas, where it was said there was no longer any basis for controversy, and to release the funds derived from them that had been impounded under the interim agreement of 1956. See Ak. Ex. 85-167, *supra*, at 1-2 (the motion), 12-19 (the supporting memorandum).

The United States made clear, in its supporting memorandum, that it was continuing to concede Chandeleur and Breton Sounds as inland water. The Chandeleur Islands, the United States indicated, were the only location where it did not contend for a coastline landward of that claimed by Louisiana. Ak. Ex. 85-167, *supra*, at 13-14, 17.¹²⁶ At Breton Sound, the United States said that it was recognizing a coastline farther seaward than the Chapman line as a result of more detailed subsequent surveys. *Id.* at 19.¹²⁷ In the

¹²⁶ The decree described a line, including the uncontested stretch from Chandeleur Island to Errol Shoal, representing the most seaward line claimed by either party as the coastline; and it awarded lands more than three miles outside that line to the United States. 382 U.S. at 288. It did not adjudicate the status of Chandeleur Sound itself.

¹²⁷ In earlier versions, the coastline at the mouth of Breton Sound was described as going from Breton Island to Bird Island and thence to Main Pass. See I Shalowitz, *supra* page 88, at 111; Ak. Exs. 85-905 and -905a. The new version used a line that joined Breton Island and Main Pass directly, as is shown in Ak. Ex. 85-905b. Although the exhibit dates the new version to 1968, the line appears to be the same one described in the 1965 motion. The United States later explained:

In 1950, in drawing the Chapman Line, the United States closed the entrance to Breton Sound by the shortest lines then possible: . . . a total of 7 miles.

By the time of the joint mapping project in 1959, the eastern head-

decree, the area newly agreed to be within three miles of the coastline at Breton Sound was awarded to Louisiana. 382 U.S. at 292.

In taking these positions on the coastline, the United States said nothing of the possible relevance of the Convention to the inland water status of Chandeleur and Breton Sounds. In light of the *California* decision, this absence seems surprising. On the other hand, the Court in *California* had also mentioned a description of the two sounds as areas that the United States claimed as inland waters. 381 U.S. at 171, quoted *supra* page 132.

Whatever the effect with respect to Louisiana of the United States' continued concession, I find that the 1965 motion adds no more to Alaska's case than did the 1961 treatment of Chandeleur and Breton Sounds. Even assuming, arguendo, that these events did express a "firm and continuing international policy to enclose inland waters within island fringes" at Breton and Chandeleur Sounds, they were later found not to express such a policy even for the rest of the Louisiana coastline.¹²⁸ Therefore they cannot be read as extending such a policy to Alaska.

land of Main Pass had extended itself to within 6 miles and 276 feet of the southern shore of Breton Island, and its growth appeared to be continuing. This crossing was already shorter than that used in the Chapman Line. The three-mile belts from the two sides probably would meet within the near future, as soon as Main Pass extended itself another 276 feet. Consequently, we concluded, purely as a practical method of rounding out our concession, that the shorter crossing should be substituted for the Chapman Line. . . .

Brief for the United States 126-27 (Aug. 1968) (Ak. Ex. 85-36, U.S. Ex. 85-901), *United States v. Louisiana*, 394 U.S. 11 (1969).

¹²⁸ See the discussion of Caillou Bay, *supra* page 151.

b. Article 4 straight baselines

The discussion so far has eliminated almost every path by which Alaska might prevail on the baseline issues. The evidence did not establish that the disputed submerged lands were considered inland waters at Alaska's statehood. For areas more than three miles from low-water mark, neither did it show that they were territorial waters at statehood.

After Alaska's admission to the Union, there were some further developments regarding the evolution of a policy for coastal islands, but these too were insufficient to give Alaska a claim to the disputed submerged lands. The poststatehood events reviewed above did not represent a "firm and continuing international policy to enclose inland waters within island fringes," *Louisiana Boundary Case*, 394 U.S. at 74 n.97, since they were understood to diverge from the new Convention and also since they were later held not to bind the United States even in Louisiana. Furthermore, it is not entirely plain how the policy developed for Louisiana would have applied on the Arctic coast, and no one examined or expressed an opinion on that question. Thus the events of 1959-1965 did not make the lands part of Alaska's "recognized territory," as that term was used in *California*, 381 U.S. at 168; the *Louisiana Boundary Case*, 394 U.S. at 74 n.97; and the *Alabama and Mississippi Boundary Case*, 470 U.S. at 111.

Alaska suggests, however, that even apart from the supposed ten-mile rule for islands of pre-Convention policy, there are other events and other considerations showing that "the most appropriate method to delimit Alaska's Submerged Lands Act grant is Article 4 straight baselines, subject to a ten-mile limitation." AB 148.

(1) *The Louisiana Boundary Case, 1969-1975*

The 1965 decree in *Louisiana* was entered with the consent of the parties. It was not until 1968 that the United

States moved for a supplemental decree defining the whole Louisiana coastline.¹²⁹ This 1968 motion, together with a cross-motion by Louisiana, led to the decision in the *Louisiana Boundary Case*, 394 U.S. 11 (1969). The Court there reaffirmed that it is for the Federal Government, not the states, to decide whether to draw straight baselines, and then it described a possible exception to this general rule. In describing the exception, the Court spoke of a "firm and continuing international policy to enclose inland waters within island fringes," and then it related the point to Article 4:

It is not contended at this time . . . that the United States has taken that posture in its international relations to such an extent that it could be said to have, in effect, utilized the straight baseline approach sanctioned by Article 4 of the Convention. . . . We do not intend to preclude Louisiana from arguing before the Special Master that, until this stage of the lawsuit, the United States had actually drawn its international boundaries in accordance with the principles and methods embodied in Article 4 of the Convention on the Territorial Sea and the Contiguous Zone.

394 U.S. at 74 n.97 (quoted more fully *supra* page 48).

As Alaska points out, it was also in the *Louisiana Boundary Case* that the United States first said that its concession of Chandeleur and Breton Sounds was at variance with the Convention. Still it did not ask to be relieved of the concession "because we think it would not be in the public interest, at this late date, to upset a fundamental assumption that has guided the conduct of both parties and their lessees in a large

¹²⁹ Motion by the United States for Entry of a Supplemental Decree as to the State of Louisiana (No. 2), Proposed Supplemental Decree, and Memorandum in Support of the Motion of the United States and in Opposition to the Motion of the State of Louisiana (filed Jan. 3, 1968) (Ak. Ex. 85-168), *Louisiana Boundary Case*, 394 U.S. 11 (1969).

area over a long period of time."¹³⁰ Alaska proposes that the continued concession, from 1958 up until 1968, was not contrary to the Convention but in fact reflected a tacit adoption of Article 4 straight baselines.

¹³⁰ The United States said:

Under the Convention . . . waters between the mainland and coastal islands do not have the status of inland waters unless the coastal nation elects to enclose them by straight baselines under Article 4. Prior to that Convention there was no international consensus on the subject; but the United States had taken the position that such waters were inland waters at least in some circumstances. In accordance with that position, we have heretofore treated Chandeleur and Breton Sounds as inland waters in this case and its predecessor, *United States v. Louisiana*, No. 13, Original, October Term, 1948; No. 12, Original, October Terms, 1949-1950; No. 7, Original, October Terms, 1951-1960.

....
We think that there would be much justification for asking at this time to be relieved of a concession, at variance with the Convention on the Territorial Sea and the Contiguous Zone, made four months before that Convention was signed by the United States, more than six years before it entered into force, and seven years before this Court announced that the grant made by the Submerged Lands Act of May 22, 1953, was to be measured by the rules of the Convention rather than by the principles followed by the United States at the time the Act was passed. However, we do not ask for such relief because we think it would not be in the public interest, at this late date, to upset a fundamental assumption that has guided the conduct of both parties and their lessees in a large area over a long period of time. We do point out, however, that since Louisiana's right to these sounds as inland waters rests solely on the basis of our adherence to our past concession, and not on any legal principle, there is no basis on which Louisiana can be allowed closing lines farther seaward than the concession warrants.

Ak. Ex. 85-168, *supra* note 129, at 78-80. In its brief of August 1968, the United States repeated:

[U]nder the rules of the Convention, Breton and Chandeleur Sounds are not inland waters. . . .

... Nevertheless, we do not now claim for the United States the

The truth of this conclusion is partly a matter of terminology. Certainly the United States did not publish charts showing straight baselines in Chandeleur and Breton Sounds, as would be required by Article 4(6) (*supra* page 26).¹³¹

areas previously assumed to be inland waters, because we think it would not be in the public interest to upset, at this date, a postulate that has guided the conduct of both parties and their lessees in a large area over a long period of time. But since the concession related to specific areas and was expressed in geographic terms, we should not be precluded from relying upon the Convention in resisting Louisiana's effort to add adjoining waters, never within the concession, to those we are willing to concede.

Brief for the United States (1968) (Ak. Ex. 85-36, U.S. Ex. 85-901), at 121-24, *United States v. Louisiana*, 394 U.S. 11 (1969).

¹³¹ Charts published in 1971 showed high seas in the sounds. See pages 166-167 *infra*; Ak. Ex. 85-905 (NOS chart 11363).

Also in 1971, the United States and Louisiana entered a stipulation giving the State the right to exploit Chandeleur and Breton Sounds but not deciding whether they were inland waters. Ak. Ex. 85-249, *reprinted in United States v. Louisiana*, Report of Special Master Walter P. Armstrong, Jr., *supra* note 122, at 63-66 (1974). The stipulation stated that it was entered "[f]or the sole purpose of expediting the ultimate resolution of this case, and without deciding whether Chandeleur or Breton Sounds are inland waters . . ." It also stated:

2. In entering this stipulation, Louisiana maintains its position that the whole of Chandeleur Sound and Breton Sound are inland waters, that straight baselines have in effect been drawn from Mississippi around the Delta and that for this and other reasons and other actions taken by both governments these are historic waters. Louisiana recognizes, however, the United States position that these are not wholly inland waters, and agrees that Louisiana does not and will not base its arguments regarding the inland status of these or any other waters in this or any future litigation between it and the United States, upon this stipulation, upon the action of the United States in fixing the Chapman Line in this area, or upon prior concessions regarding this area made by the United States for the purpose of this case and the predecessor case, *United States v. Louisiana*, 339 U.S. 699.

3. In entering this stipulation, the United States maintains that its agreement is not based on the belief that these are historic inland

Furthermore, the Special Master in the *Louisiana Boundary Case* found that the United States had not employed a straight baseline system in Louisiana. Report of Special Master Armstrong, *supra* note 122, at 5-13 (1974).

In some looser sense, of course, the closing of the sounds can be said to have amounted to a use of straight baselines, even if not quite in accordance with Article 4. Since the sounds were originally closed on the advice of the State Department, this must also have for some period been the international position and not just a position taken for purposes of the Submerged Lands Act. But even if the closing of the sounds as inland waters were attributed to Article 4 of the Convention rather than to pre-Convention policy, that still would not help Alaska. The Court said in the *Louisiana Boundary Case*:

In *United States v. California*, 381 U.S. 139, 168, we held that "the choice under the Convention to use the straight-base-line method for determining inland waters claimed against other nations is one that rests with the Federal Government, and not with the individual States."⁹⁶

⁹⁶ In the same vein, we held that the choice whether to employ the concept of a "fictitious bay" was that of the Federal Government alone. 381 U.S., at 172. That holding was, of course, consistent with the conclusion that the

waters or described by a system of straight baselines, or on any other basis than is set out at pages 120-126 of the Brief for the United States, on Cross-Motions for the Entry of a Supplemental Decree as to the State of Louisiana (No. 2), in this case in 1968, and at pages 76-79 of the Reply Brief for the United States in the same cause. The United States maintains its position, there stated, that those parts of this area which are beyond normal territorial waters measured from closing lines of juridical bays and the low-water line of the mainland and islands are high seas.

drawing of straight baselines is left to the Federal Government, for a "fictitious bay" is merely the configuration which results from drawing straight baselines from the mainland to a string of islands along the coast. See 381 U.S., at 170, n. 38.

394 U.S. at 72 & n.96. In other words, the use of a pre-Convention concept—here, "fictitious bay"¹³²—might be equated to the use of straight baselines, but the choice of terminology did not make the decision any less optional. Thus, even if the United States were said to have used straight baselines in claiming Chandeleur and Breton Sounds as inland waters, it still would not be committed to using straight baselines wherever it could.

(2) *Alaskan baselines*

Alaska cites several poststatehood events involving possible straight baseline claims in Alaska itself. None is helpful to its present case.

One cluster of items, already disposed of, concerns fishing regulations in Alaska. Some of these regulations were reissued after statehood, and a series of historical studies issued by the State Department in 1963 referred to them or their predecessors as indicating the adoption of straight baselines or at least support for the method of straight baselines. However, the Court's decision in *United States v. Alaska*, 422 U.S. 184 (1975), shows the State Department's characterization to have been mistaken. See *supra* section F(5)(b).

Another group of items concerns the work of Dr. G. Etzel Percy, who was the Geographer of the State Department at the time of Alaska's admission to the Union. In June 1959, Dr. Percy published an article explaining the principles of

¹³² The concept of a fictitious bay comes from the International Law Commission. See *supra* page 154 n.124.

the Convention and stating that he had plotted the territorial sea of the United States "[i]n order to fully explore the cartographic problems of the coast." Percy, *supra* page 136, U.S. Ex. 85-231 at 2. Although his plotting apparently did not yet extend to Alaska,¹³³ Percy did mention its southeast coast, that is, the Alexander Archipelago, as a situation for straight baselines:

The Convention on the Territorial Sea and the Contiguous Zone permits the use of straight baselines along a coast which is "deeply indented and cut into, or if there is a fringe of islands along the coast in its immediate vicinity." . . . Just where this type of situation exists is difficult to ascertain objectively, but the coast of Norway constitutes a clear-cut example, as does that of the archipelago along the southeast coast of Alaska.

Along the coasts of the continental United States—again excluding Alaska—no situation appears to exist which could be construed as requiring the use of a straight baseline.

Id. at 9 (footnotes omitted).

Later Percy did prepare charts showing straight baselines in southern Alaska,¹³⁴ and some use was made of them by

¹³³ In a footnote to the article Percy said, "The U.S. Coast and Geodetic Survey charts used in measuring the territorial sea were Atlantic and Gulf coasts, 1200 series; Pacific coast, in the 5000 series. A total of 89 charts were utilized." U.S. Ex. 85-231, *supra* page 136, at 2 n.2. Charts for Alaska would have been in the 8000 and 9000 series. See, e.g., the charts mentioned in notes 134 and 141 *infra*.

¹³⁴ For examples see Ak. Exs. 85-910a (chart 8252, Coronation Island to Lisianski Strait [in the Alexander Archipelago]), 85-910b (chart 8551, Prince William Sound [on the southern coast]), and 85-910c (chart 8502, Cape St. Elias to Shumagin Islands [also on the southern coast and including Cook Inlet]). As was brought out during the hearing, the charts actually show alternative lines, and Ak. Ex. 85-910c carries the following legend:

the Coast Guard and the Bureau of Commercial Fisheries.¹³⁵ But all of this was limited to the southern parts of Alaska, and whatever effect it might have had there, the effect would not extend to the Arctic coast.

In fact it is highly questionable whether Percy would have recommended straight baselines in the Arctic. He opposed the closing of Chandeleur Sound and showed it on his maps as partly high seas. See letter of February 29, 1960, from Solicitor General Rankin to Admiral Karo, quoted *supra* page 136 n.102; memorandum of about February 1961 by Mr. George Swarth, quoted *supra* page 149 n.118; memorandum of May 2, 1961, by Dr. Percy, quoted *supra* page 149. It is unknown whether Percy would have thought

Normal closing green

Baseline (logical) red

Baseline (possible/extreme) purple

See Tr. 2701-07, 2735-36. Some additional examples of the charts, all from the Alexander Archipelago and without alternative versions of Percy's lines, are included in *Provisional U.S. Charts Delimiting Alaskan Territorial Boundaries, Hearing Before the Senate Comm. on Commerce*, 92d Cong., 2d Sess. (1972) (Ak. Ex. 85-23) (pocket supp., nos. 12-14).

¹³⁵ See the following groups of exhibits:

Ak. Ex. 85-46, tab 4, and U.S. Ex. 85-304 (correspondence during 1963-64, primarily among personnel of the Bureau of Commercial Fisheries).

Ak. Exs. 85-196 and -197, U.S. Exs. 85-305 and -306 (correspondence of June 1967 between Percy and the Coast Guard).

Ak. Exs. 85-209, 85-214 (correspondence of 1968-69 regarding the planned printing of the Percy maps with a legend as to their provisional nature).

Later commentary by a State Department representative appears in *Provisional U.S. Charts Delimiting Alaskan Territorial Boundaries*, *supra* note 134, at 2, 17 (statement of Steven C. Nelson, special assistant to the Legal Adviser).

Chandeleur Sound or the Alexander Archipelago to be the better precedent for Stefansson Sound.

The third main episode regarding straight baselines in Alaska occurred in the 1970s. In 1970, several federal agencies agreed to establish an ad hoc Committee on the Delimitation of the United States Coastline, later informally called the Baseline Committee. The committee was organized within the existing Interagency Task Force on the Law of the Sea (chaired by the State Department Legal Adviser, John Stevenson), and it included representatives from the Departments of State, Justice, Interior, Commerce, and Transportation.¹³⁶ The committee was to "review the lines recently drawn by the Geographer of the Department of State [now Robert D. Hodgson] on existing charts" and to "determine the location of the limits of the United States territorial sea and the contiguous zone as accurately as possible in light of the data on those charts."¹³⁷ In particular, the committee was instructed to follow the 1958 Convention without using straight baselines.¹³⁸

The committee finished its delimitation of the coastline, with 155 maps in all, by the spring of 1971,¹³⁹ and the maps

¹³⁶ See U.S. Exs. 85-104 to -111, Ak. Ex. 85-244 (interdepartmental correspondence of March-September 1970).

¹³⁷ Memorandum from Carl F. Salans, Acting Legal Adviser, to members of the LOS Task Force Executive Operations Group (Aug. 7, 1970) (U.S. Ex. 85-106).

¹³⁸ Tr. 3058 (testimony of Jonathan Charney, an original member of the committee); U.S. Ex. 85-112 (apparently the "fuller description of the committee's functions" mentioned by Mr. Salans as attached to his August 7, 1970, memorandum, *supra* note 137).

¹³⁹ See U.S. Ex. 85-114, Ak. Ex. 85-243 (summary report of the committee, undated); Ak. Ex. 85-254 (memorandum dated May 18, 1971, from Deputy Attorney General Richard Kleindienst to all United States Attorneys, advising that although the maps were subject to revision, "for the present, they should be followed as representing the official position of the United States in any case where such questions arise").

were published in April.¹⁴⁰ Because the delimitation did not use straight baselines, the maps showed certain enclaves of high seas, for instance in the Alexander Archipelago.¹⁴¹ Alaskan protests led the State Department to reconsider the maps for the archipelago.¹⁴² Finally, after two years of further discussions, the State Department concluded that it would not oppose application of straight baselines to the Alexander Archipelago provided, among other things, that Alaska would agree not to use them as the basis for a claim to additional submerged lands. Memorandum from Charles N. Brower, Acting Legal Adviser, to the Interagency Task Force on the Law of the Sea (May 7, 1973) (U.S. Ex. 85-324, Ak. Ex. 85-288). The Law of the Sea Task Force, however, decided to send the matter to the Office of Management and Budget. In a letter to Senator Stevens of Alaska, a State Department spokesman explained this action as follows:

Secretary Rogers has asked that I write to inform you of action that we have taken with regard to the maritime boundaries in the Alexander Archipelago area of Alaska.

After a thorough review by the Inter-agency Law of the Sea Task Force, the majority of agencies on the Task Force agreed that the drawing of straight baselines in the area would not result in major adverse consequences in the law of the sea negotiations although there were some differences of opinion on this question. However, some

¹⁴⁰ See Ak. Ex. 85-280, item 3 (memorandum dated Aug. 30, 1972, by John R. Stevenson, dating publication of the maps to April 1971).

¹⁴¹ For the committee's treatment of the north coast of Alaska, see U.S. Ex. 85-116 (minutes of July 27, 1970, covering Coast and Geodetic Survey charts 9451 to 9478); U.S. Ex. 85-115, Ak. Ex. 85-242 (minutes of Aug. 3, 1970, further considering charts 9466 to 9469).

¹⁴² See generally U.S. Exs. 85-307 to -325; Ak. Exs. 85-23, -46, -203, -204, -217, -253, -258 to -261, -263, -266, -273, -274, -276 to -281, -283 to -288, -290, -296.

of the agencies did indicate a strong concern with the possible precedent-setting effect, both legal and political, of such action on other coastal areas of the United States, and on the respective rights of state and federal governments to the resources and revenues from the submerged lands beneath the additional areas of territorial sea and internal waters. Consequently, at the request of the Department of the Interior the matter was referred to the Office of Management and Budget for coordinating final action on the issue.

We have requested the Office of Management and Budget to take whatever action is necessary to reach a final solution to the problem and we will inform you of whatever action is taken.

Letter from Marshall Wright, Assistant Secretary for Congressional Relations, to Senator Ted Stevens (June 21, 1973) (Ak. Ex. 85-290). The record shows no further action.

Once again, the debate over straight baselines in the Alexander Archipelago was not a debate over straight baselines on the Arctic coast.

(3) Motivation

Alaska raises a point about the motivation of the United States: that "its continued refusal to use Article 4 straight baselines, traces directly to its litigation position in these domestic submerged lands cases." AB 170. On the question of motivation Alaska cites the sequence of events in the Alexander Archipelago, above, and also a much earlier letter which it calls "perhaps the most telling piece of evidence." AB 171 n.38.

This earlier letter, dated October 24, 1963, was sent by Attorney General Robert Kennedy to Under Secretary of State U. Alexis Johnson. The letter itself is not in evidence, but it is paraphrased as follows in a partially declassified State Department document:

The Attorney General, Robert F. Kennedy, sheds some light on another aspect of the problem [arising from excessive Canadian straight-baselines claims]: Recognition of Canadian claims to the waters in question could have some indirect effects in the continuing controversy between the United States and its coastal states over ownership of offshore mineral resources. Kennedy pointed out that in that controversy it was to the advantage of the United States to establish the narrowest possible limits for inland and territorial waters. The attorney general's conclusion on behalf of the Department of Justice seemed pertinent to all the responding departments.

Historical Studies Division, U.S. Dep't of State, Research Project No. 1031-B, United States Policy Regarding the Oceans and the Law of the Sea, 1960-1967 (1974), excerpt from page 31 (Ak. Ex. 85-182).

I agree with Alaska that, as these letters indicate, the United States has shown itself concerned over the effect that might follow for federal-state submerged lands litigation if it were to draw straight baselines under Article 4.¹⁴³ I do not agree that the concern invalidates the United States' position. This is not a situation in which the United States has created a contraction of Alaska's recognized territory in the Arctic; it is not a case in which the United States in effect used straight baselines but "abandon[ed] that stance solely to gain advantage in a lawsuit . . ." *Louisiana Boundary Case*, 394 U.S. at 73 n.97; see *supra* pages 47-48. Rather, it is only a case in which the United States has claimed less inland waters than it might have. The situation falls therefore

¹⁴³ In the Alexander Archipelago discussions, the Justice Department took the view that to adopt straight baselines would not add to Alaska's Submerged Lands Act grant but would very probably lead to litigation. Letter from Bruce C. Rashkow to John R. Stevenson (Dec. 1, 1972) at 5-11 (Ak. Ex. 85-276, item 2).

within the general rule of the *Louisiana Boundary Case*, as follows:

In *United States v. California*, 381 U.S. 139, 168, we held that "the choice under the Convention to use the straight-base-line method for determining inland waters claimed against other nations is one that rests with the Federal Government, and not with the individual States." Since the United States asserts that it has not drawn and does not want to draw straight baselines along the Louisiana coast, that disclaimer would, under the *California* decision, be conclusive of the matter. *Louisiana argues, however, that because the Louisiana coast is so perfectly suited to the straight baseline method, and because it is clear that the United States would employ it in the conduct of its international affairs were it not for this lawsuit, the Court should reconsider its holding in California and itself draw appropriate baselines.* While we agree that the straight baseline method was designed for precisely such coasts as the Mississippi River Delta area, we adhere to the position that the selection of this optional method of establishing boundaries should be left to the branches of Government responsible for the formulation and implementation of foreign policy. *It would be inappropriate for this Court to review or overturn the considered decision of the United States, albeit partially motivated by a domestic concern, not to extend its borders to the furthest extent consonant with international law.*

394 U.S. at 72-73 (footnotes omitted) (emphasis added).¹⁴⁴

¹⁴⁴ In a related type of case, the Court has recently confirmed that the United States may make decisions affecting federal and state rights in submerged lands on the basis of federal property interests. The Court found it reasonable for the Army Corps of Engineers, in deciding whether proposed construction of port facilities was in the public interest, to consider "whether an artificial addition to the coastline will increase the

(4) *Future foreign policy*

Alaska presented testimony designed to show that, as a matter of foreign policy, the United States ought to adopt straight baselines and probably will do so in the future.¹⁴⁵ The issue before the Master, however, is not what the United States' foreign policy should be or will be. Even if the United States did eventually adopt straight baselines, that would not change Alaska's present rights. Furthermore, the Court has indicated that it would not even change Alaska's rights after the adoption:

California argues . . . that if Congress intended "inland waters" to be judicially defined in accordance with international usage, such definition should possess an ambulatory quality so as to encompass future changes in interna-

State's control over submerged lands to the detriment of the United States' legitimate interests." *United States v. Alaska*, 503 U.S. 569, 585 (1992).

¹⁴⁵ Dr. Norton Ginsburg, Professor of Geography at the University of Chicago, compared the baseline policies of nations and showed that, of those developed nations that would benefit from straight baselines and that do not face special political circumstances arguing against straight baselines, the United States was nearly alone in not shifting to the system. Tr. 3000-3024; Ak. Exs. 85-501 to -502(b). Professor Jonathan Charney of the Vanderbilt School of Law, who had worked on submerged lands cases within the Department of Justice (and testified with its consent, Tr. 3031, Ak. Ex. 85-600), stated that there were no foreign policy reasons against adopting straight baselines and there were benefits favoring it. Tr. 3067-70. He has also published a paper remarking that the United States surely will adopt a system of straight baselines. Jonathan I. Charney, *The Offshore Jurisdiction of the States of the United States and the Provinces of Canada—A Comparison*, 12 Ocean Dev. & Int'l L. 301, 311 (1983), also in *The Law of the Sea and Ocean Industry: New Opportunities and Restraints* 426, 432 (Douglas M. Johnston & Norman G. Letalik eds., 1984). See Tr. 3037-38. It is not clear whether Professor Charney would hold to his prediction now that the United States has adopted a twelve-mile territorial sea. See *supra* section II, note 3; Tr. 3103-05.

tional law or practice. Thus, if 10 years from now the definitions of the Convention were amended, California would say that the extent of the Submerged Lands Act grant would automatically shift, at least if the effect of such amendment were to enlarge the extent of submerged lands available to the States. We reject this open-ended view of the Act for several reasons. Before today's decision no one could say with assurance where lay the line of inland waters as contemplated by the Act; hence there could have been no tenable reliance on any particular line. After today that situation will have changed. Expectations will be established and reliance placed on the line we define. Allowing future shifts of international understanding respecting inland waters to alter the extent of the Submerged Lands Act grant would substantially undercut the definiteness of expectation which should attend it. Moreover, such a view might unduly inhibit the United States in the conduct of its foreign relations by making its ownership of submerged lands *vis-à-vis* the States continually dependent upon the position it takes with foreign nations.

United States v. California, 381 U.S. 139, 166-67 (1965).

Alaska does not contest this interpretation of the effect of a future adoption of straight baselines. See Tr. 3529-30. The testimony referred to therefore shows only that Alaska's inland-water claims, "if considered as applications of the system of straight baselines permitted by Article 4 of the Convention," are not extravagant. AB 113.

7. Fairness

The central finding of this part of the report is that Stefansson Sound and other areas inside barrier islands had not become established as inland waters by Alaska's statehood. The rules defining inland waters were unclear; they very probably would not have covered Stefansson Sound; and no

actual claim to inland waters in the disputed areas had been made. Neither did the disputed areas become inland waters after Alaska's statehood.

Alaska says that fairness requires an outcome in its favor: that Stefansson Sound, Mississippi Sound, and Chandeleur and Breton Sounds are all geographically similar and so should all be treated alike. In my opinion, a broader view shows this argument to be mistaken. Several other areas are also geographically similar, in Alaska's own sense of satisfying a ten-mile rule for islands, but they have been held not to be inland waters. Such areas exist in Florida, landward of the Florida keys; in Massachusetts, at Nantucket Sound; and in Louisiana, at Caillou Bay. See *supra* page 61 n.21 (Florida); page 58 n.18 (Nantucket Sound); and page 151 & n.122 (Caillou Bay). In terms of the normal baseline and historic bay provisions of the 1958 Convention, it is only the case of Chandeleur and Breton Sounds that is anomalous.

In terms of the technical grounds for defining inland waters that existed before the Convention, Alaska's position is again hard to justify in terms of fairness. Most states joined the Union before there existed any well-defined technical concept of inland waters. The last coastal state to be admitted, before Alaska and Hawaii, was the State of Washington in 1889. See 2 Shalowitz, *supra* page 88, at 428 (1964). Of the American precedents referred to in this report, the only pre-1889 items on near-shore islands are the *Mahler* case, concerning Long Island Sound, and the letter by Secretary of State Seward mentioning the Florida keys. See *supra* sections F(2)(b)-(c). Thus, it is doubtful that any of the older states would be able to make an inland-waters-at-statehood argument with respect to waters the United States does not now claim as inland.¹⁴⁶

¹⁴⁶ Compare *United States v. Maine*, 475 U.S. 89 (1986), in which the Court considered Massachusetts' claim to have acquired title to Nantucket Sound on a theory of "ancient title," described in part as "a clear

At the same time, subsequent developments in the concept of inland waters, up to the Convention, did not create new rights in the older states. The example here is Caillou Bay, which was enclosed as inland waters by the Chapman line but disclaimed as inland waters after the Convention. If Stefansson Sound ever did qualify as inland waters, it would have been on the same theory, whatever that was, as the theory behind the Chapman line. The distinction between Stefansson Sound and Caillou Bay, under Alaska's inland-waters-at-statehood argument, was only that Alaska became a state during the period when the theory of the Chapman line was current. The event of statehood does have significance under the equal-footing doctrine of the *Pollard* case. See generally section VIII(D), *infra*. To apply the doctrine here, however, would seem to put Alaska on a better than equal footing with the older states.

G. Conclusion

I recommend that questions 2, 3, 4, 12 and 13 be answered in favor of the United States. That is (in terms of the original language of the questions):

Question 2. The extent of Alaska's submerged lands in the leased areas should not be determined on the basis of straight baselines.

Question 12. Similarly, the extent of Alaska's offshore submerged lands between Icy Cape and the Canadian border, not included within the leased area, should not be determined on the basis of straight baselines.

Question 3. The submerged lands between the mainland and the barrier islands in the leased area (including areas

original title which is fortified by long usage." 475 U.S. at 95-96. The Court found the proof insufficient and therefore declined to decide whether the theory was valid. *Id.* at 105.

more than three miles from any upland) do not belong to Alaska on the ground that they underlie inland waters.

Question 13. Similarly, the extent of Alaska's offshore submerged lands between Icy Cape and the Canadian border, not included within the leased area, should not be determined on the basis that the waters between the mainland and the barrier islands are inland waters.

Question 4. The submerged lands between the mainland and the barrier islands in the leased area which are more than three miles from any upland, but are totally surrounded by submerged lands owned by Alaska, do not belong to Alaska on the ground that they lie within Alaska's most seaward contiguous boundary.

IV SOUTHERN HARRISON BAY

Alaska's rights to submerged lands depend in part on what waters along the Arctic coast are inland waters. Section III asked whether coastal islands have the effect of creating inland waters. This section asks whether certain waters are inland because they form a juridical bay.

Only one area is at issue, namely southern Harrison Bay:

Question 15: Is the southern portion of the area shown as "Harrison Bay" on NOS chart 16064 a juridical bay, and if so, what is the location of the line enclosing the inland waters of the bay, from which the 3-mile grant to Alaska is to be measured?

Question 15 was heard and briefed along with the questions of section III.¹

The parties agree that question 15 is to be analyzed within the general framework described in section II. Under the Submerged Lands Act, 43 U.S.C. §§ 1301-1315 (1988), Alaska is entitled to the lands beneath navigable waters within its boundaries (§ 1311(a)), including lands out to a line three miles seaward from its coastline (§ 1301(a)(2)). The coastline is defined, in part, as "the line marking the seaward limit of inland waters." 43 U.S.C. § 1301(c). Thus, Alaska is entitled to the lands under whatever part of Harrison Bay is inland waters, and three miles beyond.

Furthermore, the parties agree that the extent of inland waters at Harrison Bay depends on Article 7 of the Convention on the Territorial Sea and the Contiguous Zone, *done* Apr. 29, 1958, 15 U.S.T. 1606, 516 U.N.T.S. 205. This position reflects the Court's holding, also described in section II, that the meaning of "inland waters" in the Submerged

¹ For the full titles of the briefs, here abbreviated as AB, USB, ARB, and USRB, see *supra* section III, note 3.

Lands Act should conform to the 1958 Convention. *United States v. California*, 381 U.S. 139, 161 (1965).

A. The geography

Harrison Bay lies west of the leased area, adjacent to the National Petroleum Reserve-Alaska.² The bay is shown in figure 4.1.³

As the figure indicates, Harrison Bay is divided into two parts by Atigaru Point. The northwest part, between Atigaru Point and Cape Halkett, is agreed by both parties to form a juridical bay and is not here in dispute.

The disputed area is to the southeast, landward of a line between Atigaru Point and a point off the Nechelik Channel. This area is itself bifurcated, with relatively deep indentations at both ends and a much less indented middle part. Alaska says the entire area should be closed as a bay. The United States says that only the two indentations qualify as bays. These positions are shown schematically in figure 4.2.⁴

The second part of question 15 asks, if a single closing line is to be drawn across southern Harrison Bay, what the location of that line should be. The parties agreed on its

² I find later in this report that Harrison Bay is outside the boundary of the National Petroleum Reserve-Alaska. This finding accords with the positions of both parties. See *infra* section VIII, discussing question 7.

³ Figure 4.1 is an excerpt from NOS chart 16004, which shows the Harrison Bay area on a scale of 1:700,000. Chart 16064, referred to in question 15 and using a scale of about 1:50,000, is too large for convenient reproduction here.

⁴ The closing lines the United States has adopted are also shown on United States Exhibit 85-101, which is a copy of NOS chart 16064. Only for the eastern indentation is the closing line printed on the chart. For the western indentation, the chart does not show the closing line because the line does not change the outer limit of the adjacent three-mile belt. Tr. 3162, U.S. Ex. 85-124.

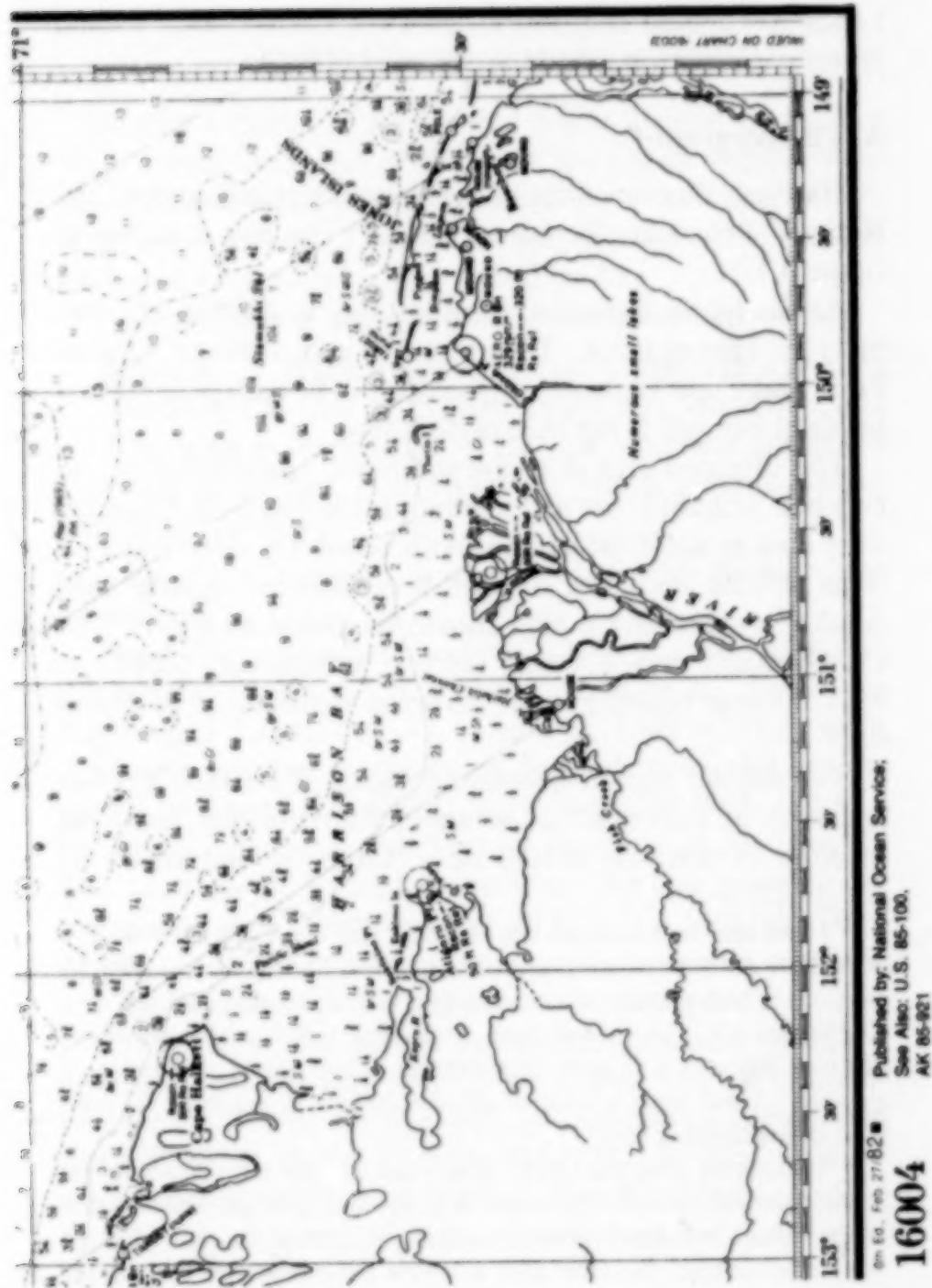


Figure 4.1. Harrison Bay.

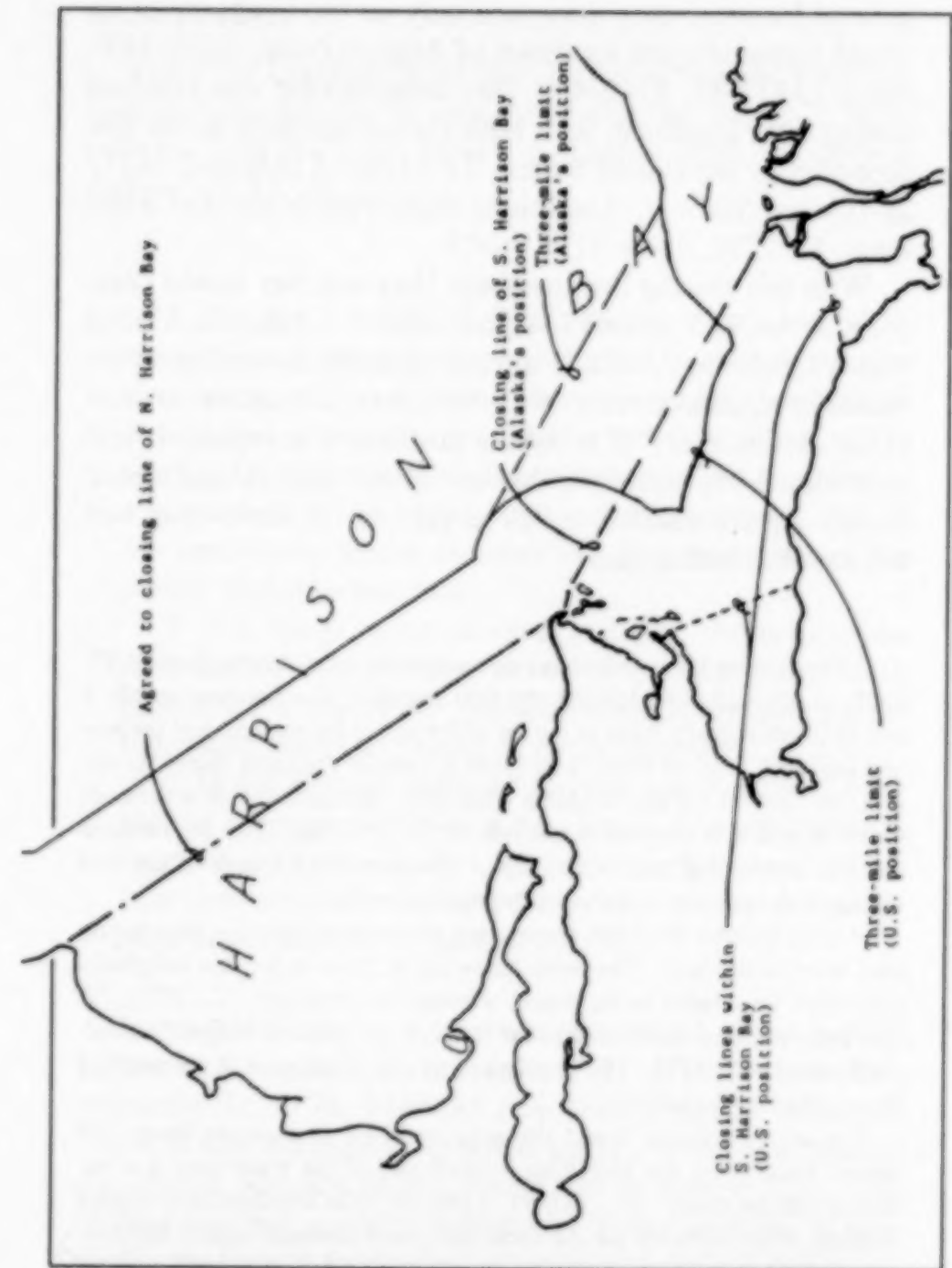


Figure 4.2. The parties' positions on closing lines for Harrison Bay.

general location; they disagreed only on the treatment of an island formation just southeast of Atigaru Point. USB 107-09; Tr. 3177-81, 3240-45. This disagreement was resolved during final argument, with both parties agreeing to the line proposed by the United States. Tr. 3614-16 (Alaska), 3627-28 (United States).⁵ The line is about twelve nautical miles long. Tr. 2798, 2849, 3178.

With this closing line, southern Harrison Bay would comprise about 72.9 square nautical miles.⁶ Under the United States' position, Alaska is already entitled, according to the Master's measurements, to all but about six square nautical miles of this area. If Alaska's position is accepted, it will gain those six square miles as inland waters and about twenty square nautical miles as part of the three-mile belt beyond the closing line.

⁵ The closing line would have two segments. On Alaska Exhibit 85-920K (a copy of chart 16064), the first segment runs between points A and M (from Atigaru Point to the tip of the island formation), and the second segment, from an island near point K (part of the same island formation) to point H (at the Nechelik Channel). Because the area between points M and K is exposed at low tide, Tr. 2781, 2784, 2795-96, no closing line across that area is required. The combined length of the two closing line segments is about twelve nautical miles.

Alaska Exhibit 85-920K shows two earlier proposals for the closing line, marked in black. The more landward of these is the line originally suggested by Alaska to its expert witness, Dr. Prescott. Tr. 2771-72. The more seaward approximates the line that Dr. Prescott himself considered proper. Tr. 2774. The line agreed to is a refinement of the seaward line marked on the exhibit.

⁶ Alaska's witness found the area enclosed to measure about 250 square kilometers, not including a small part of the water area that extended off the chart. Tr. 2787-91, 2798-99. The conversion to square nautical miles is based on the facts that one kilometer equals approximately 0.6214 mile and one mile equals approximately 0.8690 nautical miles. *CRC Standard Mathematical Tables* 3-4 (William H. Beyer ed., 28th ed. 1987).

B. The issues

The 1958 Convention on the Territorial Sea and the Contiguous Zone defines the concept of a bay in Article 7. Most relevant here are paragraphs 2 through 4, with the dispute focused on Article 7(2):

Article 7

....

2. For the purpose of these articles, a bay is a well-marked indentation whose penetration is in such proportion to the width of its mouth as to contain landlocked waters and constitute more than a mere curvature of the coast. An indentation shall not, however, be regarded as a bay unless its area is as large as, or larger than, that of the semi-circle whose diameter is a line drawn across the mouth of that indentation.

3. For the purpose of measurement, the area of an indentation is that lying between the low-water mark around the shore of the indentation and a line joining the low-water marks of its natural entrance points. . . .

4. If the distance between the low-water marks of the natural entrance points of a bay does not exceed twenty-four miles, a closing line may be drawn between these two low-water marks, and the waters enclosed thereby shall be considered as internal waters.

....

It is agreed that the semicircle test, stated in the second sentence of Article 7(2), is satisfied. Tr. 2795-99 (Alaska's witness); Tr. 3176, 3184-85 (the United States' witness). There is also agreement, as noted earlier, on the line joining the natural entrance points, mentioned in Article 7(3). The closing line that would join them, some twelve miles, is well within the twenty-four-mile limitation of Article 7(4).

The issues concern the first sentence of Article 7(2), which defines a bay in terms such as "well-marked indenta-

tion" and "landlocked waters." First, what is its relationship to the second sentence of the paragraph? The United States contends that the test of the first sentence is independent from that of the second. Alaska contends that the second sentence of Article 7(2), the semicircle test, was added to provide an objective measure for whether the more subjective requirements of the first sentence are met. On Alaska's reading, the first sentence becomes superfluous.

Second, if the tests are independent, does southern Harrison Bay satisfy the first sentence of Article 7(2)? Alaska says that it does; the United States, that it does not.

Alaska will prevail on question 15 if either of these issues is decided in its favor. Otherwise, question 15 should be decided in favor of the United States.

C. The relation between the two sentences of Article 7(2)

It is clear that Article 7(2) is poorly drafted. Professor O'Connell states:

In view of the drafting history, there is little to indicate the relationship between the two sentences of Article 7(2). Do they contain independent standards, each of which must be satisfied? Or is the second sentence a specification of the standard in the first? . . .

....

The draftsmanship of this paragraph of Article 7 does little credit to the International Law Commission . . .

1 Daniel P. O'Connell, *The International Law of the Sea* 393-94 (I.A. Shearer ed. 1982). Similarly, Professor Westerman writes:

In its totality, Article 7, paragraph two represents a somewhat uneasy marriage between the general configuration requirements of sentence one and the highly specific mathematical requirements of sentence two. . . .

....

Do the well-marked and landlocked requirements have independent validity under paragraph two? Is there any reason to retain somewhat imprecise geographical norms in the face of a geometric formula? These questions do not admit of easy answer.

Gayl S. Westerman, *The Juridical Bay* 93, 96 (1987).

1. The Court's interpretation

Alaska is not the first state to argue that the second sentence of Article 7(2) is only a specification of the first. In *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11 (1969), the Court rejected a similar contention. The Court was dealing with East Bay, a V-shaped indentation in which the semicircle test was not satisfied by a closing line drawn at the seawardmost headlands. Louisiana argued for the use of an internal line that did satisfy the semicircle test. In holding against Louisiana, the Court said:

The United States argues that the area within East Bay enclosed by Louisiana's proposed line does not constitute a bay because there is no "well-marked indentation" with identifiable headlands which encloses "landlocked" waters. Indeed, it is said, there is not the slightest curvature of the coast at either asserted entrance point. We do not now decide whether the designated portion of East Bay meets these criteria, but hold only that they must be met. We cannot accept Louisiana's argument that an indentation which satisfies the semicircle test *ipso facto* qualifies as a bay under the Convention. Such a construction would fly in the face of Article 7(2), which plainly treats the semicircle test as a minimum requirement. And we have found nothing in the history of the Convention which would support so awkward a construction.

394 U.S. at 54.

A related issue in the *Louisiana Boundary Case* concerned the status of Ascension Bay. Finding that Ascension Bay met the semicircle test, 394 U.S. at 53, the Court noted:

The United States argues—in addition to its contention that it does not meet the semicircle test—that “Ascension Bay” is not a true bay because it is a “mere curvature of the coast” rather than a “well-marked indentation” containing “landlocked waters.” If this contention is accepted, then it is of course irrelevant that “Ascension Bay” meets the semicircle test. See *infra*, at 54. Whether an indentation qualifies as a bay under the criteria of Article 7 other than the semicircle test is a factual question which should be submitted to the Special Master in the first instance.

394 U.S. at 48 n.64.⁷

The Court stated the same point more recently in *United States v. Maine (Rhode Island and New York Boundary Case)*, 469 U.S. 504 (1985):

[W]e repeat the Convention’s criteria for determining whether a bay exists: There must be a “well-marked indentation” into the coast and it must “constitute more than a mere curvature of the coast.” The indentation must enclose an area “as large as, or larger than, that of the semicircle whose diameter is a line drawn across the mouth of the indentation.” The indentation must “contain land-

⁷ The Special Master later found that the additional criteria were met, both for an area within East Bay and for Ascension Bay. *United States v. Louisiana*, Report of Special Master Walter P. Armstrong, Jr., at 26–35, 45–48 (1974) (U.S. Ex. 85-415), reprinted in *The Reports of the Special Masters of the United States Supreme Court in the Submerged Lands Cases, 1949–1987* (Michael W. Reed, G. Thomas Koester, & John Briscoe eds., 1991), at 181, and in 59 I.L.R. 249. The Master’s report was accepted by the Court. *United States v. Louisiana (Louisiana Boundary Case)*, 420 U.S. 529 (1975).

locked waters.” And the mouth of the bay must not exceed 24 miles.

469 U.S. at 514; see also *id.* at 520–21. The Court went on to choose between possible closing lines for Long Island Sound, either of which would have met the semicircle test, on the basis of whether or not the enclosed waters were landlocked. *Id.* at 526.

Alaska concedes that it is facing a matter of stare decisis, Tr. 3604, but it urges that the Court’s interpretation of Article 7(2) was mistaken.⁸ In neither the *Louisiana Boundary Case* nor the *Rhode Island and New York Boundary Case*, Alaska says, did the parties bring the history of Article 7 to the attention of the Court. ARB 59–62, Tr. 3601–04; see also AB 182 n.139. The United States replies that the history is consistent with the Court’s construction of the article. USB 94 n.47, USRB 23.⁹

⁸ Alaska also seeks to distinguish the *Rhode Island and New York Boundary Case* in that the Court there had already found that a bay existed; the question then became the location of its natural entrance points. As the United States observes, however, this argument does not serve to distinguish away the Court’s treatment of East Bay and Ascension Bay in the *Louisiana Boundary Case*.

⁹ The United States also gives examples of formations that would satisfy the semicircle test but fail the subjective standards of the first sentence of Article 7(2). One is Long Island and Block Island Sounds, if closed by the line the Court rejected in the *Rhode Island and New York Boundary Case*. Another, offered as a reductio ad absurdum, is San Francisco Bay, if it were closed by a line outside the Golden Gate running from Duxbury Point, at Bolinas, in the north to Point San Pedro, near Pacifica, in the south. USB 95–96; Tr. 2854–56, 3187–89, 3190–94, 3216–17; U.S. Ex. 85-126. Alaska has suggested various ways of explaining this apparent counterexample to the sufficiency of the semicircle test. ARB 69–70; Tr. 3632–36. In view of my conclusions about the history of Article 7(2), I find it unnecessary to rule on the merits of these arguments.

Most of the historical material is readily available¹⁰ and could have been judicially noticed in the previous cases. I have reviewed it nevertheless. I find that, even if it be appropriate to reopen the question of interpreting Article 7(2), the history tells in favor of the Court's previous interpretation.¹¹

2. The history of Article 7(2)

a. Early proposals

Alaska's material does suggest that the early proponents of the semicircle test meant it to be a sufficient condition for waters to qualify as a bay. The test was devised in 1930 by R.S. Patton, the Director of the Coast and Geodetic Survey. Patton wrote:

The term "bay", as actually applied in common usage, is so indefinite as not to be susceptible of *precise definition which is at once inclusive and exclusive*. . . .

¹⁰ *League of Nations Conference for the Codification of International Law [1930]* (ed. Shabtai Rosenne 1975) (4 vols.); the Yearbooks of the International Law Commission for 1951-1956, U.N. Docs. A/CN.4/SER.A/1951 & 1951/Add.1 through A/CN.4/SER.A/1956 & 1956/Add.1; and U.N. Conference on the Law of the Sea, Official Records, U.N. Docs. A/CONF.13/37-39 (1958) (3 vols.).

¹¹ The negotiating history of Article 7(2) is thus used to confirm an interpretation based on ordinary meaning. Such a use of supplementary means of interpretation is approved in the initial language of article 32 of the Vienna Convention on the Law of Treaties, *done* May 22, 1969, 1155 U.N.T.S. 331, 340 (entered into force Jan. 27, 1980). The Vienna Convention has not been ratified by the United States but is regarded as codifying customary international law. Restatement (Third) of the Foreign Relations Law of the United States, part III, introductory note (1986).

As will appear in section D, the history of Article 7(2) also provides background for interpreting the relatively vague requirements of its first sentence.

....
In theory, the question whether a bay is intra- or extra-territorial would seem to depend upon the extent to which the waters penetrated into the land, or, more precisely, to the ratio of that penetration to the dimension of the entrance.

Can that ratio be expressed satisfactorily in mathematical terms?

R.S. Patton, *The Three-Mile Limit* [1930] (Ak. Ex. 85-56, U.S. Ex. 85-200) (emphasis added). Patton then answered his own question by proposing a semicircle test.

Patton's memorandum was written in preparation for the League of Nations Conference for the Codification of International Law, held at The Hague in 1930. The memorandum was sent to the United States delegation at The Hague, and the delegation included a semicircle test in its proposals to the conference. See generally Aaron L. Shalowitz, *The Concept of a Bay as Inland Waters*, 13 *Surveying and Mapping* 432, 433-34 (1953) (Ak. Ex. 85-43, Ak. Ex. 85-336); 1 Aaron L. Shalowitz, *Shore and Sea Boundaries* 34 nn.7-8 (U.S. Dep't of Commerce Pub. 10-1, 1962). The United States' proposal on bays evidently would have made the semicircle test sufficient, for it said in part:

[T]he determination of the status of the waters of a bay or estuary, as interior waters or high sea, shall be made in the following manner:

....
... If the area enclosed . . . exceeds the area of a semicircle . . . , the waters of the bay or estuary inside of the straight line shall be regarded, for the purposes of this Convention, as interior waters; otherwise they shall not be so regarded.¹²

¹² 3 *Acts of the Conference for the Codification of International Law* 198, League of Nations Doc. C.351(b).M.145(b).1930.V (1930) (Ak. Ex.

The subcommittee to which the proposal was referred took no action on it, however; its recommendation on bays provided a ten-mile maximum closing line but left "bay" undefined.¹³

b. *The International Law Commission*

The 1930 Hague Conference closed without adopting a convention. The drafting of an article on bays was next taken up by the International Law Commission.¹⁴ In 1951, at its third yearly session, the Commission decided to initiate work on the topic "régime of territorial waters" and appointed, as special rapporteur, Mr. J.P.A. François of the Netherlands.¹⁵ François prepared draft articles, including an

85-1), reprinted in 4 Rosenne, *supra* note 10, at 1203, 1400. See also S. Whittemore Boggs, *Delimitation of the Territorial Sea: The Method of Delimitation Proposed by the Delegation of the United States at the Hague Conference for the Codification of International Law*, 24 Am. J. Int'l L. 541, 550 (1930) (Ak. Ex. 85-61, U.S. Ex. 85-223).

The details of the proposal, omitted above, were different from the semicircle test eventually included in Article 7(2). For discussion of the 1930 version, see 1 Aaron L. Shalowitz, *Shore and Sea Boundaries* 36-40 (U.S. Dep't of Commerce Pub. 10-1, 1962).

¹³ 3 *Acts of the Conference for the Codification of International Law*, *supra* note 12, at 217-20. The subcommittee observed, "Most delegations agreed to a width of ten miles provided a system were simultaneously adopted under which slight indentations would not be treated as bays." The United States proposal was appended to the report as one possible such system, as was a French proposal, but the subcommittee noted that it was expressing no opinion on them. The parent committee took no action on the subcommittee's draft but called it "valuable material for the continuation of the study of the question." *Id.* at 209, 211.

¹⁴ For the establishment of the International Law Commission, see *supra* section III, note 89.

¹⁵ *Report of the International Law Commission to the General Assembly*, 6 U.N. GAOR Supp. (No. 9) at 17, U.N. Doc. A/1858 (1951), reprinted in [1951] 2 Y.B. Int'l L. Comm'n, *supra* note 10, at 123, 140.

article on bays, which went through five versions from 1952 through 1955.

In his first two drafts,¹⁶ François simply repeated the recommendation of the subcommittee at the Hague Conference. In commentary, he recommended obtaining the assistance of experts. A committee of such experts met at The Hague on April 14-16, 1953; S. Whittemore Boggs of the State Department was the American member. The experts proposed, in relevant part:

A bay is a bay in the juridical sense, if its area is as large as, or larger than that of the semi-circle drawn on the entrance of that bay. Historical bays are excepted; they should be indicated as such on maps.¹⁷

François accepted this concept in his later drafts.¹⁸ The ver-

¹⁶ J.P.A. François, *Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/53 (1952) (in French), [1952] 2 Y.B. Int'l L. Comm'n, *supra* note 10, at 25; J.P.A. François, *Second Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/61 (Feb. 19, 1953) (in French), [1953] 2 Y.B. Int'l L. Comm'n, *supra* note 10, at 57.

¹⁷ *Report of the Committee of Experts on Technical Questions Concerning the Territorial Sea*, Annex to François (1953), *infra* note 18. The question to which this proposal responded was as follows: "Accepting the low-water line system as the general rule for measuring the territorial sea, while in bays a straight line across the bay should circumscribe the 'inland waters', what technical observations can be made as to . . . the definition of a bay as opposed to a mere curvature in the coastline?" *Id.*

¹⁸ François's revision of May 1953 used language nearly identical to the experts' proposal. J.P.A. François, *Addendum to the Second Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/61/Add.1 (May 18, 1953) (in French), [1953] 2 Y.B. Int'l L. Comm'n, *supra* note 10, at 75, 76-77; also U.S. Ex. 85-228 (in English).

A further revision, dated February 1954, changed the language but continued to use only the semicircle test for a bay:

1. The waters of a bay will be considered internal waters if the line drawn across the opening does not exceed 10 miles.

2. One understands by "bay" in the sense of the first paragraph, an

sion that was brought before the Commission for action, in June 1955, read as follows:

1. The waters of a bay will be considered internal waters if the line drawn across the opening does not exceed 10 miles from the low-water mark.

2. One understands by "bay" in the sense of the first paragraph, an indentation whose area is equal to or greater than the area of the semi-circle having as diameter the line drawn between the points limiting the entrance of the indentation. . . .¹⁹

Up to this point, in summary, views that the semicircle test should be a sufficient condition for waters to qualify as a bay had been expressed or at least implied a number of times: by Admiral Patton in 1930, by the American delegation to the 1930 Hague Conference, by the committee of experts that advised the International Law Commission in 1953, and by the special rapporteur in his draft articles of 1953 through 1955. Had the rapporteur's draft been adopted by the International Law Commission and carried forward into the 1958 Geneva Convention, it seems clear enough that it would give the result for which Alaska now contends. But this history refers to earlier drafts rather than the final one.

indentation whose area is equal to or greater than the area of the semi-circle having as diameter the line drawn between the points limiting the entrance of the indentation. . . .

J.P.A. François, *Third Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/77 (Feb. 4, 1954) (in French; Master's translation), [1954] 2 Y.B. Int'l L. Comm'n, *supra* note 10, at 1, 4-5. For François's final revision, of May 1955, see the text and note 19 *infra*.

¹⁹ J.P.A. François, *Amendments Proposed on the Basis of the Observations of Governments on the Draft of Provisional Articles Adopted by the Commission at Its Sixth Session*, U.N. Doc. A/CN.4/93 (May 16, 1955) (in French; Master's translation), [1955] 2 Y.B. Int'l L. Comm'n, *supra* note 10, at 5. Paragraph 2 is unchanged from the previous draft, quoted *supra* note 18.

The critical fact is that François's definition of "bay" was not adopted. François presented his proposal on June 22, 1955.²⁰ An alternate proposal was promptly offered by Mr. García Amador of Cuba; among other things it removed the limit on the length of a closing line and defined "bay" as in the first sentence of present Article 7(2):

1. For the purpose of these regulations, a bay is a well-marked indentation, whose penetration inland is in such proportion to the width of its mouth as to contain landlocked waters and constitute more than a mere curvature of the coast.²¹

In the debate that followed, García Amador explained that the definition in paragraph 1 was based on the conclusions the United Kingdom had presented in the *Anglo-Norwegian Fisheries Case*, 1951 I.C.J. 116, 122, para. 6, with the addition of a reference to landlocked waters based on the dissenting opinion of Judge McNair, *id.* at 163.²²

Other speakers criticized García Amador's definition as extremely vague and perhaps begging the question.²³ Sir

²⁰ *Summary Records of the 317th Meeting*, [1955] 1 Y.B. Int'l L. Comm'n, *supra* note 10, at 201, 205.

²¹ *Id.* at 206. García Amador's proposal contained several additional paragraphs, including a semicircle test in paragraph 3:

3. The waters within a bay shall be considered inland waters:

(a) If the area of the indentation is as large or larger than that of the semicircle drawn on the entrance of that indentation.

(b) If the bay is totally bordered by the territory of a single State.

Id. However, Commission members viewed only his paragraph 1 as relating to the definition of a bay (as opposed to the conditions for closing a bay). *Summary Records of the 318th Meeting*, June 23, 1955, [1955] 1 Y.B. Int'l L. Comm'n, *supra* note 10, at 207, 210, paras. 36-39. García Amador's paragraph 1 was acted on separately, *id.* at 211, and the Commission never returned to his paragraph 3.

²² *Summary Records of the 317th Meeting*, *supra* note 20, at 206-07.

²³ *Summary Records of the 318th Meeting*, *supra* note 21, at 207, 209.

Gerald Fitzmaurice of the United Kingdom characterized paragraph 1 as containing a good general description possibly helpful to a layman, but not a precise definition of the kind proposed by the special rapporteur. He therefore proposed that it be amplified by adding the following sentence at the end:

An indentation shall not, however, be regarded as a bay unless its area is as large or larger than that of the semicircle drawn on the entrance of that indentation.²⁴

García Amador accepted this amendment, and, with the amendment, the Commission adopted his paragraph 1.²⁵ It became part of the article as finally adopted by the Commission²⁶ and was submitted, with other articles adopted at the 1955 session, to governments for comment.²⁷

The 1955 action of the International Law Commission put the definition of "bay" into the following form (which is essentially the same as present Article 7(2)):

Article 7

Bays

1. For the purpose of these regulations, a bay is a well-marked indentation whose penetration inland is in such proportion to the width of its mouth as to contain land-locked waters and constitute more than a mere curvature of the coast. An indentation shall not, however, be regarded as a bay unless its area is as large as or larger than that of the semi-circle drawn on the entrance of that indentation.

²⁴ *Id.* at 210.

²⁵ *Id.* at 210-11.

²⁶ *Summary Records of the 324th Meeting*, July 1, 1955, [1955] 1 Y.B. Int'l L. Comm'n, *supra* note 10, at 247, 251.

²⁷ *Report of the International Law Commission to the General Assembly*, 10 U.N. GAOR Supp. (No. 9) at 15, U.N. Doc. A/2934 (1955), reprinted in [1955] 2 Y.B. Int'l L. Comm'n, *supra* note 10, at 19, 34.

Thus, the Commission rejected a proposal that, on its face, would have made the semicircle test sufficient for bayhood. Instead it adopted a provision that, on its face, made the semicircle test only a necessary condition supplementing other more subjective criteria. The question remains whether there is anything in the subsequent history that calls for reading the language adopted as nevertheless making the semicircle test sufficient. I find that there is not.

In the rapporteur's commentary accompanying the 1955 article, it is true, the amendment was ignored and a sentence was included that appeared to make a mathematical test sufficient for bayhood:

Comment

The first paragraph, which is borrowed from the report of the Committee of Experts reproduced as an addendum to the second report by the special rapporteur on the régime of the territorial sea (A/CN.4/61/Add.1), lays down the conditions that must be satisfied by an indentation or curve, if it is to be regarded as a bay. In adopting this provision, the Commission repaired the omission to which attention had already been drawn by The Hague Codification Conference of 1930. An indentation will be regarded as a bay provided it conforms to the criterion adopted by the Commission, namely, that the distance between the two extremities shall be twice the depth of the indentation, i.e., twice the distance between the closing line and the head of the bay.²⁸

But at the 1956 session of the International Law Commission, the article on bays was considered again in the light of

²⁸ *Id.* at 18, [1955] 2 Y.B. Int'l L. Comm'n at 36-37. François regarded the last sentence as equivalent to the semicircle test. *Summary Records of the 317th Meeting*, *supra* note 20, at 206, para. 50.

the comments by governments.²⁹ The definition of a bay was left intact,³⁰ and the commentary, as revised, omitted the sentence that specified sufficient mathematical conditions:

(1) Paragraph 1, which is taken from the report of the committee of experts mentioned above, lays down the conditions that must be satisfied by an indentation or curve in order to be regarded as a bay. In adopting this provision, the Commission repaired the omission to which attention had already been drawn by The Hague Codification Conference of 1930 and which the International Court of Justice again pointed out in its judgement in the Fisheries Case. Such an explanation was necessary in order to prevent the system of straight baselines from being applied to coasts whose configuration does not justify it, on the pretext of applying rules for bays.³¹

At the 1956 session the International Law Commission

²⁹ *Summary Records of the 365th and 366th Meetings*, [1956] 1 Y.B. Int'l L. Comm'n, *supra* note 10, at 187, 190-93, 195-97.

³⁰ The Commission rejected an amendment, proposed by Mr. Sandström of Sweden, that would have omitted the definition of a bay and provided instead:

1. The waters of a bay shall be considered as internal waters if:
 - (a) By reason of the depth of penetration of the bay, or by its configuration generally, its waters are closely linked to the land domain;
 - (b) The line drawn between the points marking the entrance of the bay at low water does not exceed x miles;
 - (c) The area of the bay is as large as or larger than that of the semi-circle drawn on this line, and
 - (d) The coasts belong to a single State.

Id. at 195. During the discussion of the amendment, François did remark that "[i]t was difficult to imagine that any indentation to which the last three criteria applied could nevertheless not be a bay." *Id.* at 196.

³¹ *Report of the International Law Commission to the General Assembly*, 11 GAOR Supp. (No. 9) at 15, U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. Int'l L. Comm'n, *supra* note 10, at 253, 268-69.

produced its final report on the law of the sea, and it recommended the calling of an international conference to prepare one or more conventions.³² This recommendation led to the 1958 Geneva Conference on the Law of the Sea, whose work began from the 1956 draft articles.

c. *The 1958 Geneva conference*

At the 1958 conference, the United States proposed an amendment to the definition of "bay" that would have omitted most of the requirements of the first sentence, making it close to François's 1955 proposal (quoted *supra* page 190):

For the purpose of these articles, a bay is a well-marked coastal indentation with an area at least equal to that of a semi-circle whose diameter is a line drawn across the mouth of the indentation; this line is the closing line of the bay and constitutes the baseline. . . .³³

The attached comments explained:

The words "contain land-locked waters and constitute more than a mere curvature of the coast" in the first sentence of the draft article lack legal precision and are unnecessary in view of the requirement relating to the area of a semi-circle.³⁴

The United Kingdom also proposed an amendment, which made only drafting changes in the definition of "bay" but which inserted a new paragraph stating that Article 7 applies only to bays whose coasts belong to a single state.³⁵

³² *Id.* at 3-4, [1956] 2 Y.B. Int'l L. Comm'n at 255-56.

³³ U.N. Doc. A/CONF.13/C.1/L.109 (Mar. 31, 1958), U.N. Conference on the Law of the Sea, 3 Official Records, *supra* note 10, at 241.

³⁴ *Id.*

³⁵ U.N. Doc. A/CONF.13/C.1/L.101 (Mar. 27, 1958), U.N. Conference on the Law of the Sea, 3 Official Records, *supra* note 10, at 227, 228. The new paragraph is now Article 7(1) of the Convention.

When Article 7 was considered in committee, the United States withdrew its amendment in favor of the United Kingdom's.³⁶ The latter was adopted, immediately followed by the adoption of a twenty-four-mile closing line.³⁷ The committee made no other significant changes in Article 7, and the version reported was adopted by a plenary meeting of the conference with little discussion.³⁸

The language introduced by García Amador in 1955 was thus retained in addition to the semicircle test. This language—now the first sentence of Article 7(2)—was recognized to be imprecise, both in the 1955 debate of the International Law Commission and in the United States' 1958 proposal. Nevertheless the International Law Commission adopted the language, after adding the semicircle test, in lieu of a proposal using the semicircle test alone; and the 1958 Geneva conference left the definition unchanged. The history from 1955 through 1958, then, fails to show that the semicircle test alone was understood to be enough to qualify waters as a bay.

d. Other writing

Finally, Alaska relies on an article written after the 1958 conference by Sir Gerald Fitzmaurice, who had proposed the semicircle amendment to García Amador's definition in 1955 and who was a delegate to the Geneva conference in 1958. In this article, Fitzmaurice quoted the first sentence of Article 7(2) and then continued:

However, in the interests of precision, *the Commission went further than this, and proposed a definite criterion*

³⁶ U.N. Conference on the Law of the Sea, 1st Comm., 47th mtg., 3 Official Records, *supra* note 10, at 144.

³⁷ *Id.* at 146.

³⁸ U.N. Conference on the Law of the Sea, 19th plen. mtg., 2 Official Records, *supra* note 10, at 61, 63.

for the relationship of penetration to width, and this is now embodied in the Convention as follows: "An indentation shall not, however, be regarded as a bay unless its area is as large as or larger than, that of the semi-circle whose diameter is a line drawn across the mouth of that indentation." Other technical points are embodied in the article, but what it comes to on a rough general description is that, to be a bay, an indentation must penetrate inland to a distance equivalent to at least half its breadth at the mouth. This is not a specially exacting criterion, but it is sufficient to ensure that mere curvatures or only moderate depressions do not rank as bays As the International Law Commission said in paragraph (1) of their Commentary on the article on bays, a definition of what constituted a bay proper "was necessary in order to prevent the system of straight baselines from being applied to coasts whose configuration does not justify it, on the pretext of applying the rules for bays."

Fitzmaurice, *The Territorial Sea and the Contiguous Zone*, 8 Int'l and Comp. L.Q. 73, 84 (1959) (Ak. Ex. 85-406) (Alaska's emphasis, AB 183; footnotes omitted). Alaska reads this passage as saying that the semicircle test was included in Article 7(2) to give a mathematical formulation for the otherwise too subjective criteria for a bay. From that it concludes that the semicircle test provides not only a necessary condition, but a sufficient condition, for waters to be landlocked and qualify as more than a mere curvature of the coast.

I cannot agree with the conclusion. Fitzmaurice's article itself, in the last sentence quoted, makes clear that the concern was to state a necessary condition, a relatively precise minimum requirement, for waters to qualify as a bay. The drafters were clearly concerned to prevent nations from claiming too much as inland waters. The language they adopted—that "[a]n indentation shall not . . . be regarded as

a bay unless" it meets the semicircle test—was well adapted for that purpose. The drafters did not display a corresponding concern that nations might claim too little as inland waters. Hence there was no political impetus to make the full definition of a bay as precise as the necessary condition supplied by the semicircle test. Accordingly, it would be unjustified to elevate the semicircle test to a sufficient condition, as Alaska wishes to do.

Alaska has also called attention to two other publications. Both refer to the 1982 Convention on the Law of the Sea, Article 10 of which is nearly identical to Article 7 of the 1958 Convention. United Nations Convention on the Law of the Sea, *done* Dec. 10, 1982, in *The Law of the Sea*, U.N. Sales No. E.83.V.5 (1983).

The more significant of these citations is to a United Nations report. U.N. Office for Ocean Affairs and the Law of the Sea, *The Law of the Sea: Baselines, an Examination of the Relevant Provisions of the United Nations Convention on the Law of the Sea*, U.N. Sales No. E.88.V.5 (corrected printing 1989). This study was prepared by a group of technical experts that included expert witnesses for both parties in the present proceeding: Professor Victor Prescott of the University of Melbourne, for Alaska, and Dr. Robert W. Smith of the Department of State, for the United States. See *id.* at 66–68. In its exposition of the article on bays, the study may be read as saying that it is sufficient for an indentation to meet the semicircle test. *Id.* at 29, para. 67. It is better read, however, as ambiguous on the point, for it also speaks of the subjective description in the first sentence as containing "useful phrases," *id.*; it cites the cases in which the Court has held the semicircle test a minimum requirement, *id.* at 28, para. 65 and n.18; and the introduction to the document states that it "attempts to give guidance . . . without prejudging controversial matters of law," *id.* at ix.

Alaska's second citation is to a work that does seem to

make the semicircle test a sufficient condition for a bay. 1 E.D. Brown, *Sea-Bed Energy and Mineral Resources and the Law of the Sea: The Areas Within National Jurisdiction* § 1.3.2 (1984). I read this statement as merely an incautious paraphrase. Its context is an introductory overview of the rules for inland and territorial waters; the treatment of bays consists of a single paragraph; and there is no supporting reasoning or citation of authority.³⁹

I will thus treat the first sentence of Article 7(2) as imposing requirements supplementary to the semicircle test of the second sentence.

D. Application of Article 7(2)

The first sentence of Article 7(2) requires that a bay be "a well-marked indentation whose penetration is in such proportion to the width of its mouth as to contain landlocked waters and constitute more than a mere curvature of the coast." The parties have approached this sentence in terms of four interrelated questions: whether south Harrison Bay is a well-marked indentation, how deeply it penetrates the coast, whether it constitutes more than a mere curvature of the coast, and whether it contains landlocked waters. I will treat these questions in the following order:

1. Is there, *prima facie*, a well-marked indentation? If so:
2. Is its penetration in such proportion to the width of its mouth as to make it more than a mere curvature of the coast?
3. Is its penetration in such proportion to the width of its mouth as to contain landlocked waters?

³⁹ On the other hand Westerman, who also examines the history, finds the Court's construction in the *Louisiana Boundary Case*, *supra* page 183, to be the more reasonable one. Gayl S. Westerman, *The Juridical Bay* 93–98 (1987).

Regarding questions 1 and 2, the history indicates that "well-marked indentation" and "mere curvature" refer to different parts of a spectrum, not to independent requirements.⁴⁰ Alaska's expert witness testified to a similar understanding. Tr. 2804. Accordingly, an indentation can be either well marked or a mere curvature, but it cannot be both. Thus, if question 2 is answered yes, that would confirm a *prima facie* positive answer to question 1. If question 2 were answered no, it would follow that there is no well-marked indentation after all.

The statement of question 3, like that of question 2, follows the language of Article 7(2). I note preliminarily, however, that the statement may be misleading in indicating that penetration is the sole measure of landlockedness. On the contrary, the Court has tended to treat landlockedness as a question separate from penetration. *United States v. Maine (Rhode Island and New York Boundary Case)*, 469 U.S. 504 (1985). I will discuss this matter further in section D(3).

1. Initial analysis of the "well-marked indentation" question

The United States' expert witness, Dr. Smith, emphasized the combination of criteria, that is, that the indentation be well-marked, be more than a mere curvature, and penetrate far enough to contain landlocked waters. Tr. 3163, 3185-86, 3196. In his opinion, the only areas satisfying the criteria were northern Harrison Bay and the two arms of southern Harrison Bay—all of which are conceded to qualify as bays. Tr. 3161-63, 3185. Dr. Smith concluded that southern Harrison Bay as a whole was not a well-marked indentation. He explained that he found the coastline between the two arms to be relatively smooth and to continue the general east-west

⁴⁰ See, e.g., the question addressed to the Committee of Experts in 1953, *supra* note 17.

direction of the coast beyond the Colville River delta in the Jones Islands area. Tr. 3161; see also figure 4.1; Tr. 3170-71, 3173-74.

Dr. Smith's position is similar to that taken by the inter-departmental Baseline Committee,⁴¹ which was responsible for the United States' original decision to close only the two arms of southern Harrison Bay. The record indicates that, since the Baseline Committee was established in 1970, it has considered Harrison Bay on four occasions.⁴² On each occasion, the Committee closed at most the two arms.⁴³ Its most recent minutes on the subject state:

⁴¹ Formally, the Committee on the Delimitation of the United States Coastline. See *supra* section III, pages 166-67.

⁴² The Committee considered Harrison Bay in 1970, 1973, 1976, and 1982. For the Committee's minutes and related reports of its actions, see U.S. Exs. 85-115, -116 (1970); Ak. Ex. 85-279, U.S. Ex. 85-117 (1972-73); U.S. Exs. 85-118, -119 (1976); Ak. Ex. 85-327, U.S. Exs. 85-120 to -124 (1981-82).

Reconsideration in 1973 appears to have been prompted by the Navy's action of May 19, 1972, purporting to extend the boundaries of NPR-4 (now called the National Petroleum Reserve-Alaska) to include both northern and southern Harrison Bay. See Ak. Exs. 85-270, -271, -275, and section VIII(A), *infra*. For the 1976 action, the minutes explain that the matter "may be relevant in litigation over the boundaries" of the Petroleum Reserve. U.S. Ex. 85-118. The 1982 consideration is similarly described in the minutes as "an issue which may arise soon" in the present litigation. U.S. Ex. 85-122.

⁴³ The minutes of July 27, 1970 (U.S. Ex. 85-116) state, "From Atigaru Point a closing line will be drawn south to the shore at about 150°34' W." If the report in the minutes is correct, the Committee's decision was to close southern Harrison Bay as a whole, by a line considerably seaward of any closing line suggested in the present proceeding. It seems likely, however, that the minutes contain a typographical error and that 151°34' W. was the intended terminus. The latter line, which closes only the west arm, is consistent with the Committee's later deliberations on that area, see U.S. Ex. 85-121, and the stated terminus of 150°34' would have been off the chart the Committee was considering, see Ak. Ex. 85-911C.

The Committee . . . decided that, even if the southeastern portion of Harrison Bay met the semi-circle test, it should not be closed off as a bay because it is not a well-marked indentation of the coast. . . . This decision is consistent with previous practice in double-headed bays such as Shelikof Bay/Gilmer Bay and Tenakee Inlet/Fresh Water Bay

Minutes of April 14, 1982 (U.S. Ex. 85-124).⁴⁴

Alaska's witness on Harrison Bay, Dr. Prescott, paraphrased the words "a well-marked indentation" as "a recess which can be easily recognized without any uncertainty." This requirement he found to be satisfied. Tr. 2805-06. Dr. Prescott also compared well-marked indentations with mere curvatures of the coast, reviewing a variety of formations on the southern coast of Australia. Tr. 2827-29; Ak. Ex. 85-405.

The criteria are admittedly subjective. For the initial requirement of a well-marked indentation, I find Alaska's expert witness more persuasive. I agree that the recess can be identified without any uncertainty; indeed, it is marked by two quite deep indentations, one at each side. The United States says the coastline between these indentations merely continues the direction of the coast beyond the Colville River delta, east of the recess. But the delta creates a bulge in the coastline, and no reason for ignoring its existence has been suggested. The United States' witness also acknowledged that, west of the recess, the coastline does shift direction. Tr. 3161.

It has not been suggested that the Baseline Committee's

⁴⁴ On this occasion, the Committee also considered the possibility of closing both north and south Harrison Bay by a single closing line. It was found, however, that such a closing line would be 39.8 nautical miles long and that the combined area would fail the semicircle test. U.S. Exs. 85-121, -122.

determination should be decisive. Cf. Tr. 3461. I will examine the precedents cited by the Committee in section D(3)(c).

The United States argues, however, that the subsidiary bays should be disregarded in determining whether south Harrison Bay is more than a mere curvature of the coast. I disagree. In section C, I found that the two sentences of Article 7(2) provide different tests for a bay. Surely, though, all the tests should be applied to the same area. In carrying out the semicircle test of the second sentence, Dr. Smith and Dr. Prescott both included the two arms of south Harrison Bay as part of the indentation. Tr. 2789-90, 3182, 3185. That procedure was consistent with *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 48-53 (1969), in which the Court said that subsidiary indentations could be included, for purposes of the semicircle test, if the combined areas could "reasonably be deemed a single large indentation." 394 U.S. at 53.⁴⁵ Unlike the situation in the *Louisiana Boundary Case*, the arms of south Harrison Bay are not separated from the outer indentation by strings of islands or any other features. It would be inconsistent to include the arms for purposes of the second sentence of Article 7(2) but to exclude them for the first.

⁴⁵ The question in the *Louisiana Boundary Case* was "whether and to what extent indentations within or tributary to another indentation can be included in the area of the latter for purposes of the semicircle test." 394 U.S. at 48. Louisiana argued that such indentations should always be included; the United States, that inner bays should be included "only if they can reasonably be considered part of the single, outer indentation." *Id.* at 51. The particular areas in question included Ascension Bay (the outer indentation) and Barataria and Caminada Bays, which were separated from Ascension Bay by strings of islands. The Court held that the islands should be ignored. Without them, it found the entrance to the inner bays wide enough that, even under the United States' approach, the combined bays could reasonably be considered a single large indentation. *Id.* at 52-53.

In support of excluding the arms of south Harrison Bay for the purpose of the curvature question, the United States refers to *Re Dominion Coal Co.*, 40 D.L.R. 2d 593 (Sup. Ct. N.S. 1963), discussed in 1 O'Connell, *supra* page 182, at 400-02. This Nova Scotian case dealt with whether Cape Breton County had taxing jurisdiction in Spanish Bay, a broad shallow indentation containing two subsidiary indentations. The court held that Spanish Bay was not part of the county, four judges agreeing that it was not inland water. 40 D.L.R. 2d at 599, 632-33, 645, 653.⁴⁶ Judge Patterson, ignoring the subsidiary indentations, found that "the indentation of Spanish Bay is as a whole a rather gentle inward curve." *Id.* at 645.⁴⁷ Although the case thus provides some support for the United States, the controlling precedent is the

⁴⁶ For three of these judges, the result also rested in part on interpretation of an 1824 Order in Council that established the county's boundaries as running "along the sea shore, across the entrances of all the Harbours and Rivers"—without mentioning the entrances to bays. 40 D.L.R. 2d at 633, 646, 652-53. The fourth judge construed the Order in Council to include "all interior or national waters" within the county. *Id.* at 599.

⁴⁷ In dissent, however, Judge Currie took the subsidiary indentations into account and found Spanish Bay to be a well-marked indentation:

I think an examination of the map . . . establishes that Spanish Bay has those characteristics which readily mark a water as a bay, and in this instance is an inland water. Such an examination should not overlook nor dismiss the two heavily marked indentations of the two large estuaries created by the estuary of the Little Bras d'Or entrance to the Bras d'Or lakes to the north of Spanish Bay and the large estuary that is the great harbour of Sydney and Sydney River to the south of Spanish Bay. I can find no authority in the many cases I have read which holds or even suggests that in the determination of what is a bay such estuaries with their obvious deep and wide indentation should be excluded from consideration. I can find no authority which says that merely because the estuary of Sydney Harbour is in fact a harbour, that therefore it should not receive its proper designation as a well-marked indentation in Spanish Bay. I think that even without Little Brass [sic] d'Or and Sydney Harbour, it can be said that

Louisiana Boundary Case, *supra* page 203. Moreover, *Dominion Coal Company* was based on pre-Convention law. 40 D.L.R. 2d at 601-02, 610, 632-33. The court did not consider how its treatment of the indentations would mesh with the application of the semicircle test to Spanish Bay.

I thus tentatively conclude that southern Harrison Bay is a well-marked indentation. To test this conclusion, I next consider whether, under Article 7(2), its "penetration is in such proportion to the width of its mouth as to . . . constitute more than a mere curvature of the coast."

2. Penetration and mere curvature

As Dr. Prescott testified for Alaska, the depth of penetration can be measured in a number of ways. Tr. 2806-24. For example, one method would draw the penetration line at the midpoint of the closing line and perpendicular to it. Another method would draw the perpendicular wherever on the closing line it penetrates most deeply. In a perfect semicircle, either method would produce the same penetration line, with a ratio of 1:2 (radius:diameter), or 50%.

For southern Harrison Bay, Dr. Prescott applied the second method and obtained ratios deeper than for a semicircle. Using a closing line close to that later agreed on by the parties, he obtained figures ranging from 53.05% to 65.29%. For north Harrison Bay (conceded to be a juridical bay), the corresponding figure was 58.36%.⁴⁸ Ak. Exs. 85-402, 85-921; Tr. 2808-14.

Spanish Bay is a well-marked indentation. The inclusion of these estuaries puts the matter beyond doubt.

40 D.L.R. 2d at 613.

⁴⁸ The range of figures for southern Harrison Bay reflected two questions. One was whether the penetration line would be permitted to cross water only, to cross an island, or to cross part of the mainland as well. The other concerned the closing line length to be used in calculating the

A third method, suggested by Hodgson and Alexander as representing "the most logical method" for "determining true penetration of the water into the land," is to use as the penetration line "the longest straight line which may be drawn from any point on the closing line to the head of the bay."⁴⁹ Here the penetration and closing lines need not be perpendicular. Although there was some question as to how to identify the head of the bay, Dr. Prescott applied this method and derived penetration ratios as high as 120% for south Harrison Bay and 97% for north Harrison Bay. Tr. 2818-20; Ak. Ex. 85-404.

Still a fourth method, preferred by Dr. Prescott, was "the shortest line from the point of deepest penetration to the closing line of the bay." Tr. 2821. Using this method, he drew the penetration line as a sequence of four straight-line segments, Ak. Ex. 85-920K, and obtained a penetration ratio of 71.09% to 76.67%.⁵⁰ Tr. 2823; Ak. Ex. 85-402. Again this compared with 58.36% for north Harrison Bay. Tr. 2824.

The United States, however, objects to settling on any one specific penetration measure and argues that "the true inquiry" should go to "the feature's entire configuration in penetrating the land." USB 100. Its expert witness, Dr. Smith, criticized some of the measures, Tr. 3222-24, 3252-53, and suggested that the measurement of penetration called

ratio: either a straight line between the extreme headlands, or the shorter actual closing line, which, because of an island, is broken into segments. For northern Harrison Bay, there is a single figure because neither of these issues arises.

⁴⁹ Robert D. Hodgson & Lewis M. Alexander, *Towards an Objective Analysis of Special Circumstances* 8 (Law of the Sea Inst., Univ. of R.I., Occasional Paper No. 13, 1972) (Ak. Exs. 85-401, -403; U.S. Ex. 85-222).

⁵⁰ Again depending on the closing line length to be used. See *supra* note 48. The line segments were permitted to cross islands but not the mainland. Tr. 2823.

for a subjective judgment, Tr. 3230. In particular, the United States notes that all Dr. Prescott's penetration lines went into the western arm, not the shallower central part of the indentation whose status as inland waters is in dispute.

The fact that Dr. Prescott's lines all go to the western arm does not make them objectionable *per se*. The court held otherwise in the *Anglo-Norwegian Fisheries Case*, 1951 I.C.J. 116, 141, which was the very case from which the penetration requirement of Article 7(2) was drawn.⁵¹

The base-line between points 11 and 12, which is 38.6 sea miles in length, delimits the waters of the Svaerholt lying between Cape Nordkyn and the North Cape. The United Kingdom Government denies that the basin so delimited has the character of a bay. Its argument is founded on a geographical consideration. In its opinion, the calculation of the basin's penetration inland must stop at the tip of the Svaerholt peninsula (Svaerholtklubben). The penetration inland thus obtained being only 11.5 sea miles, as against 38.6 miles of breadth at the entrance, it is alleged that the basin in question does not have the character of a bay. The Court is unable to share this view. It considers that the basin in question must be contemplated in the light of all the geographical factors involved. The fact that a peninsula juts out and forms two wide fjords, the Laksefjord and the Porsangerfjord, cannot deprive the basin of the character of a bay. It is the distances between the disputed baseline and the most inland point of these fjords, 50 and 75 sea miles respectively, which must be taken into account in appreciating the proportion between the penetration inland and the width at the mouth. The Court concludes that Svaerholthavet has the character of a bay.

I conclude that the penetration of south Harrison Bay, by whatever measure, is ample to make it more than a mere cur-

⁵¹ See *supra* page 191.

vature of the coast. This conclusion confirms the tentative finding of the previous section that south Harrison Bay is a well-marked indentation.

3. *Penetration and landlocked waters*

The last question is whether, under Article 7(2), south Harrison Bay has "penetration in such proportion to the width of its mouth as to contain landlocked waters." Despite this language of the article, the relationship between penetration and landlockedness is unclear. The United States suggests that the test of sufficient penetration is whether the enclosed waters are landlocked, USB 101, but its expert, Dr. Smith, said that landlockedness is a very difficult concept to pinpoint, Tr. 3174. For Alaska, Dr. Prescott testified to various possible interpretations of "landlocked waters." Tr. 2824-26, 2859-64, 2869. At final argument, Alaska took the position that in view of the vagueness of the term, landlockedness should be judged in terms of the objective measures of penetration discussed in section D(2), *supra*. Tr. 3606-07, 3629-30.

a. *The meaning of "landlocked waters"*

The phrase "landlocked waters" in Article 7(2) was drawn from a dissenting opinion in the *Fisheries Case*, 1951 I.C.J. 116, 163 (McNair, J.). See *supra* page 191. The opinion gives little guidance as to the meaning of the phrase, for Judge McNair used it not to define bays but to classify them:

There are two kinds of bay in which the maritime belt is measured from a closing line drawn across it between its headlands, that is to say, at the point where it ceases to have the configuration of a bay. The first category consists of bays whose headlands are so close that they can really be described as landlocked. . . .

The other category of bay whose headlands may be

joined for the purpose of fencing off the waters on the landward side as internal waters is the historic bay

1951 I.C.J. at 163-64. When the International Law Commission made "landlocked waters" part of the definition of a bay, it did so despite the rapporteur's specific criticism that the phrase was imprecise.⁵²

The Supreme Court considered the meaning of "landlocked waters" in *United States v. Maine (Rhode Island and New York Boundary Case)*, 469 U.S. 504 (1985):

The Convention does not define "landlocked," and this Court has not yet felt it appropriate to offer a comprehensive definition of the term. Scholars interpreting the Convention have given the term a subjective and common-sense meaning. We agree with the general proposition that the term "landlocked" "implies both that there shall be land in all but one direction and also that it should be close enough at all points to provide [a seaman] with shelter from all but that one direction."

469 U.S. at 525 (footnote omitted) (quoting P.B. Beazley, *Maritime Limits and Baselines: A Guide to Their Delineation* 13 (The Hydrographic Society, Spec. Pub. No. 2, 2d ed. rev. 1978) (U.S. Ex. 85-229)). The Court also noted that "the term 'landlocked' is not to be literally applied," 469 U.S. at 525 n.18, and it quoted Hodgson and Alexander, *supra* note 49, at 6, 8:

The concept of land-locked is imprecise and, as a result, may call for subjective judgments. . . . Basically, the character of the bay must lead to its being perceived as part of the land rather than of the sea. Or, conversely, the bay, in a practical sense, must be usefully sheltered and

⁵² *Summary Records of the 318th Meeting*, June 23, 1955, [1955] 1 Y.B. Int'l L. Comm'n, *supra* note 10, at 207. See generally *supra* pages 191-92.

isolated from the sea. Isolation or detachment from the sea must be considered the key factor.

469 U.S. at 525 n.19.

The question in the *Rhode Island and New York Boundary Case* was whether Long Island Sound and Block Island Sound constituted a juridical bay under Article 7. 469 U.S. at 505. The Court first found that Long Island should be treated as an extension of the mainland and that a bay was therefore formed. *Id.* at 514–20. It then turned to the question of the proper closing line. *Id.* at 520–26.⁵³

The Special Master's conclusion, to which the States took exception, was that the closing line should run essentially straight north from Montauk Point (the eastern tip of Long Island) to Watch Hill Point, a distance of fourteen nautical miles. This line enclosed only part of Block Island Sound. The States argued for a line from Montauk Point northeast to Block Island and then north to the mainland at Point Judith, a total of twenty-two miles. The Court, noting that Block Island was eleven miles from the line from Montauk Point north to Watch Hill Point, characterized the States as arguing "that an island well beyond what would otherwise be the mouth of the bay can cause the bay to have an entirely different mouth." *Id.* at 524. It rejected this contention on the ground that, "under any reasonable interpretation of the Convention, Block Island is too removed from what would otherwise be the closing line of the bay to affect that line." *Id.*⁵⁴

⁵³ For a chart clearly showing the alternative closing lines, see *United States v. Maine (Rhode Island and New York Boundary Case)*, Report of Special Master Walter E. Hoffman, app. C (Oct. Term, 1983) (U.S. Ex. 85-125), reprinted in *The Reports of the Special Masters of the United States Supreme Court in the Submerged Lands Cases, 1949–1987* (Michael W. Reed, G. Thomas Koester, & John Briscoe eds., 1991), at 809, exceptions overruled, 469 U.S. 504 (1985).

⁵⁴ Block Island was also seaward of a line running directly from Montauk Point to Point Judith. The Court noted that that line exceeded the

The Court went on to note that "most significantly, some of the waters enclosed by the suggested closing line [based on Block Island] are not landlocked, as required by the Convention." *Id.* at 525. The extra area that would be included was described as "not in the sheltered confines of what the Convention is willing to recognize as a bay," as "exposed to the open sea on two sides," and as "not predominantly surrounded by land or sheltered from the sea." *Id.* at 526. The Court concluded that this was "the nearly inevitable result . . . of a theory that would treat islands well beyond the natural entrance points of an indentation as creating multiple mouths to that indentation." *Id.*

b. *Adaptation of the Court's test*

In the *Rhode Island and New York Boundary Case*, the question whether waters were landlocked arose in the context of deciding where to put a closing line. The situation in southern Harrison Bay is somewhat comparable. Whereas there is no question of extending out into the ocean beyond natural entrance points, there is a question of whether to employ a pair of closing lines, one for each arm, or to close the area as a whole.

The Court indicated in the *Rhode Island and New York Boundary Case* that whether waters were landlocked should be determined from the mariner's point of view⁵⁵ and, in

twenty-four-mile maximum for a closing line. 469 U.S. at 521–22, 525. A nearby line, from Montauk Point to the Point Judith Harbor Works, was just under twenty-four miles, but the Court found it unnecessary to pass on whether the harbor works could qualify as a headland. *Id.* at 522 n.13.

⁵⁵ A thoroughgoing adoption of the mariner's point of view would no doubt require recourse to many factors, such as the direction and strength of the winds, the height of surrounding land, and the depth of the waters. See Tr. 2860–61. On the other hand, it has been suggested that the twenty-four-mile limit on a closing line is too high to be compatible with

particular, that there should be land in all but one direction. There, the area that the States' closing line would have added to inland waters formed a four-sided figure, two sides of which (from Montauk Point to Block Island and from Block Island to Point Judith) were largely open to the sea. In Harrison Bay, of the area that Alaska's closing line would add to inland waters, only one side (from the island near Atigaru Point to the Nechelik Channel) would be open.

The United States argues, however, and its expert witness testified, that the added area in Harrison Bay is open to the sea from two directions, the north and the east. Tr. 3174-75, 3230-33, 3624. Alaska replies that this is an accident of the way the indentation happens to be oriented. If it were rotated so that the proposed closing line ran due east from Atigaru Point rather than southeast, then the combined areas would in fact be open only to the north. Tr. 3598-99. The point is valid, but it is insufficient to establish that the waters

the notion of landlockedness in the mariner's sense. Tr. 2869; Beazley, *supra* page 209, at 13; Kathleen L. Walz, *The United States Supreme Court & Article VII of the 1958 Convention on the Territorial Sea & Contiguous Zone*, 11 U.S.F. L. Rev. 1, 15 (1976). Hodgson and Alexander, writing before the *Rhode Island and New York Boundary Case*, went so far as to state, "The nature of a bay is determined by its two dimensional character . . ." Hodgson and Alexander, *supra* note 49, at 20. The United States cites this last passage and adds, USB 98:

Depth of the waters, their utility, considerations of defense or economic importance are not germane. Also, although many publicists have suggested additional objective criteria to be superimposed on those of Article 7(2), none [for landlocked waters] have been accepted in customary international law or adopted in practice by the United States.

Whatever may be the ideal approach to applying the mariner's point of view, the record in this case does not enable me to go beyond a two-dimensional analysis. In any event such an analysis seems justified by the difficulties that would arise in developing fuller data and fuller criteria to apply to those data.

should be considered landlocked. By a similar rotation, any curvature of the coast, however slight, could be given an east-west line between headlands, leaving the waters open only to the north. Therefore, the extent to which the waters of south Harrison Bay are open to the sea seems better measured by angles than by cardinal directions.

The next observation is that the waters within different parts of an indentation will be open to the sea to varying extents. Inside an indentation that was a perfect semicircle, the waters at every point along the coast would be open to the sea for exactly 90 degrees. As one moves away from the coast and toward the closing line, the angle of exposure increases until, at the closing line itself (along an otherwise straight coastline), the waters would be open to the sea for 180 degrees.⁵⁶ Accordingly, the most appropriate place to measure exposure within an indentation appears to be along the coast.

In a somewhat irregular indentation, the waters along the coast may at some points be exposed more broadly and at other points more narrowly than in a semicircle.⁵⁷ In gen-

⁵⁶ These results follow from a theorem of Euclid: "In a circle the angle in the semicircle is right, that in a greater segment less than a right angle, and that in a less segment greater than a right angle . . ." Euclid, 2 *The Thirteen Books of Euclid's Elements*, Book III, Proposition 31, at 61 (Thomas L. Heath trans., 2d ed., Dover reprint 1956) (ca. 300 B.C.). A circle may be divided into two segments by drawing a straight line through it. An "angle in a segment" is defined as "the angle which, when a point is taken on the circumference of the segment and straight lines are joined from it to the extremities of the straight line which is the *base of the segment*, is contained by the straight lines so joined." *Id.*, Definition 8, at 1. For an alternate presentation of the material, see, e.g., James E. Thompson, *Geometry for the Practical Man* 118-19 (M. Peters ed., 3d ed. 1962).

⁵⁷ For example, in an irregular bay that narrowly meets the semicircle test, some parts of the coastline will be deeper than the radius of the semicircle and others will be shallower. The latter may be exposed for more than 90 degrees. For an illustration, see Walz, *supra* note 55, at 23. Ac-

eral, the comparison may be made by overlaying on the indentation a semicircle whose diameter coincides with the proposed closing line. At points on the coast lying outside the semicircle, the exposure will be less than 90 degrees (as measured by the angle from one end of the diameter, to the chosen point, to the other end of the diameter). Points on the coast lying within the semicircle, if protected only by the headlands of the indentation, will be exposed for more than 90 degrees.⁵⁸

tual formations of this sort include Monterey Bay, which the Court held should be closed in *United States v. California*, 381 U.S. 139, 169-70 (1965), and northern Harrison Bay in Alaska, which was closed by the Baseline Committee, Tr. 3204-09, Ak. Ex. 85-279 (draft minutes of Oct. 5, 1972).

Another example of how parts of the coast may be exposed for more than 90 degrees comes from the 45-degree test for determining the natural entrance points of a bay. This test, described in Hodgson and Alexander, *supra* note 49, at 10-12 (U.S. Ex. 85-222), and in Beazley, *supra* page 209, at 16-17 (U.S. Ex. 85-229), was referred to with approval by the Court in the *Rhode Island and New York Boundary Case*, 469 U.S. at 522 n.14. The idea is that, at the entrance to a bay, the coast should turn inland by at least 45 degrees on each side. In the illustration in Beazley, p. 16, the line A-B is a proper closing line because the inward turns are sufficient. Nevertheless, the next headlands inward are exposed to the open sea by angles of about 98 degrees (angle A-D-B) and 105 degrees (angle B-C-A).

⁵⁸ The comparison described in the text is most clearly valid where the proposed closing line is a single line segment. It would not have been directly applicable in the *Rhode Island and New York Boundary Case*, where the States' proposed closing line for Block Island Sound was broken into two segments, both of which contributed to the exposure of waters along the coast from Watch Hill Point to Point Judith. See *supra* pp. 210-11. For an indirect comparison in the *Rhode Island and New York Boundary Case*, one might overlay a semicircle on the line running directly between Montauk Point and the Point Judith Harbor Works. See 469 U.S. at 522 n.13. The whole coastline in Block Island Sound lies inside that semicircle.

For southern Harrison Bay, such a semicircle may be placed on the long segment of the single closing line (from an island near Atigaru Point to the Nechelik Channel).⁵⁹ Much of the coastline of the indentation lies outside the semicircle, not only in the arms that are already closed but also in the area that would be added to inland waters if the single closing line is adopted. These parts of the coast, exposed for less than 90 degrees, should clearly be considered open to the sea in only one direction and therefore landlocked.

The part of the coast that intrudes into the semicircle, and so is exposed for more than 90 degrees, lies primarily between the two arms of southern Harrison Bay. According to the Master's measurements, the navigator in Harrison Bay along this coastline is open to the sea for arcs of up to about 112 degrees.⁶⁰ The question is whether the waters in this area are so exposed that south Harrison Bay as a whole should not be regarded as landlocked for purposes of Article 7(2).

⁵⁹ Although the closing line has a short additional segment, from Atigaru Point to the tip of the island formation, this extra opening to the sea is located so that it does not contribute significantly to the exposure of waters in the indentation. For the detail of the closing line agreed upon, see *supra* note 5 and accompanying text.

⁶⁰ Angles were measured between the endpoints of the long segment of the proposed closing line, running on Ak. Ex. 85-920K from the island near point K to point H. For the further distance west of point K to Atigaru Point, the island formation provides protection from the sea.

The maximum exposure at the coastline occurs at about 151°25.7' W., 70°25.6' N. At that point the coast is about 3.86 nautical miles from the proposed closing line. Other points on the coast are closer to the proposed closing line, but they have smaller angles of exposure. For example, at the western end of the existing closing line for the eastern arm (about 151°19.2' W.), the proposed closing line is about 3.6 miles distant and the angle of exposure is about 102 degrees.

c. Precedents on double-headed bays

When the Baseline Committee declined to close southern Harrison Bay in 1982, it cited its previous practice on double-headed bays and referred in particular to two such formations in Alaska. *See supra* pages 201–02. Alaska has identified other formations that might be called double-headed bays and that have been closed by a single line. The United States, on the other hand, now resists application of the term “double-headed bay” to southern Harrison Bay at all. It defines the term as “a water body where a single peninsula divides or serves as a common side for two subsidiary bodies of water.” Tr. 3627. It observes that the arms of Harrison Bay are divided not by a peninsula but a “smooth, flat coastline,” and it finds the case against closing south Harrison Bay as a whole even more compelling than for the precedents cited by the Baseline Committee. *Id.*; *see also* Tr. 3169–70, 3210–11.

In fact nothing depends on the exact scope of the term “double-headed bay.” Whatever the definition, the formations adduced by the parties provide useful points for comparison with south Harrison Bay. These formations are summarized in the table on page 218 and are shown in figures 4.3 through 4.6 (pages 220–24).⁶¹

⁶¹ Figures 4.3 through 4.6 (as well as figure 4.1, *supra* page 178) are excerpts of nautical charts, sometimes referred to as chartlets. Some of the chartlets depict bay closing lines and territorial sea limits, and others show neither. Where the territorial sea is shown on United States charts, it is represented as a three-mile belt. The extension of the territorial sea to twelve miles, effected by Presidential proclamation in late 1988, is not reflected. *See* Proclamation No. 5928, 3 C.F.R. 547 (1988), *reprinted in* 43 U.S.C. § 1331 note (1988).

Small scale charts published by the National Ocean Service omit the delimitations of bay closing lines and the territorial sea. Thus, the chartlets of Harrison Bay (fig. 4.1) and of Bodega and Tomales Bays, California (fig. 4.5) do not show them. For Bodega and Tomales Bays, the bay

The figures in the table are based on the waters that would be part of the bay with a single closing line but open sea if the arms are closed individually. In each case, land lies inside the semicircle drawn on a single closing line. The part of the coastline within the semicircle may contain a single salient cape or, as in the case of south Harrison Bay, it may be relatively smooth. Column A in the table measures the angle of exposure, either at the single cape or at the point of maximum exposure along the stretch of coast. Column B gives the distance from this point to a single closing line. Column C gives the length of a single closing line. Both distances are in nautical miles. Column D gives their quotient, the distance divided by the length. It provides a measure of minimum penetration of the double-headed bay, as opposed to the measures of maximum penetration discussed in section D(2). Although the parties described only measures of maximum penetration, it appears to the Master that the penetration ratio at the most exposed point along the coast provides a more revealing comparison between double-headed formations. The last column in the table gives the decision in the

closing line has been drawn on the chartlet for illustration.

The National Ocean Service's large scale charts show the Baseline Committee's delimitation of the territorial sea and, if such delimitations are affected by the Committee's bay closing lines, they usually show the closing lines as well. Thus, the chartlet of Gilmer and Shelikof Bays, Alaska (fig. 4.4) shows the Baseline Committee's bay closing lines and resulting outer limit of the territorial sea. The chartlet of Freshwater Bay and Tenakee Inlet, Alaska (fig. 4.3) also shows the Committee's bay closing lines. While the chartlet does not extend to the resulting territorial sea delimitation, the complete chart does show it.

Finally, the chartlet of Svaerholthavet, Norway (fig. 4.6), published with the pleadings in the *Anglo-Norwegian Fisheries Case*, shows both the court's bay closing line and four-mile Norwegian territorial sea boundary as the most seaward solid and dotted lines respectively. *Memorial of the United Kingdom (U.K. v. Nor.)*, 1951 I.C.J. Pleadings (Maps, Fisheries Case), annex III (Jan. 27, 1950).

Approximate Measurements of Double-Headed Bays

Bay	(A) Maximum exposure at coast	(B) Distance from coast to single closing line	(C) Length of single closing line	(D) Minimum penetra- tion (B/C)	Decision
Tenakee/Fresh- water (Alaska)	166°	0.4 nm	5.1 nm	7.8%	Two bays ^a
Shelikof/Gilmer (Alaska)	154°	0.8 nm	7.8 nm	10.3%	Two bays ^a
Bodega/Tomales (California)	106°	1.7 nm	4.5 nm	37.8%	One bay ^b
Svaerholthavet (Norway)	115°	11.5 nm	38.6 nm	29.8%	One bay ^c
Southern Harri- son (Alaska)	112°	3.86 nm	12.0 nm	32.2%	?

^a Decisions of the Baseline Committee. Minutes of Sept. 20, 1971 (Ak. Ex. 85-259).

^b *United States v. California*, 432 U.S. 40 (1977) (second supplemental decree, entered on joint motion of the parties).

^c *Anglo-Norwegian Fisheries Case*, 1951 I.C.J. 116, 141. The figures in columns B and C are taken from the opinion. *Id.*

specific case, with a footnote as to its source. The measurements are those of the Master except as otherwise noted.⁶² All figures are approximate.

The first two entries in the table, Tenakee Inlet/Freshwater Bay and Shelikof Bay/Gilmer Bay, are the precedents relied on by the Baseline Committee in declining to close southern Harrison Bay by a single line. For Tenakee Inlet and Freshwater Bay (fig. 4.3), one closing line runs from South Passage Point to East Point; the other, from East Point to North Passage Point. Had the bays been closed by a single line running directly between North and South Passage Points, East Point would have been brought within the bay. But East Point is exposed to the open sea for about 166 degrees (as measured by the angle North Passage Point–East Point–South Passage Point). The distance inland to East Point, from a single closing line, would be only 7.8% of the length of that closing line—compared to 50% for any point on the coast in a perfect semicircle. The case of Shelikof Bay and Gilmer Bay (fig. 4.4), though slightly less extreme, is similar. Along the coast between the two present closing lines, the widest angle of exposure occurs at the northern tip of Point Mary. The angle is over 150 degrees, with penetration inland at that point of only 10.3%. Given these figures, it would be difficult to justify a finding that the waters at Point Mary and East Point were landlocked. It is not surprising that the Baseline Committee closed the arms of each pair of bays individually.

⁶² The parties were given an opportunity to check the Master's measurements and, where needed, provide corrections.

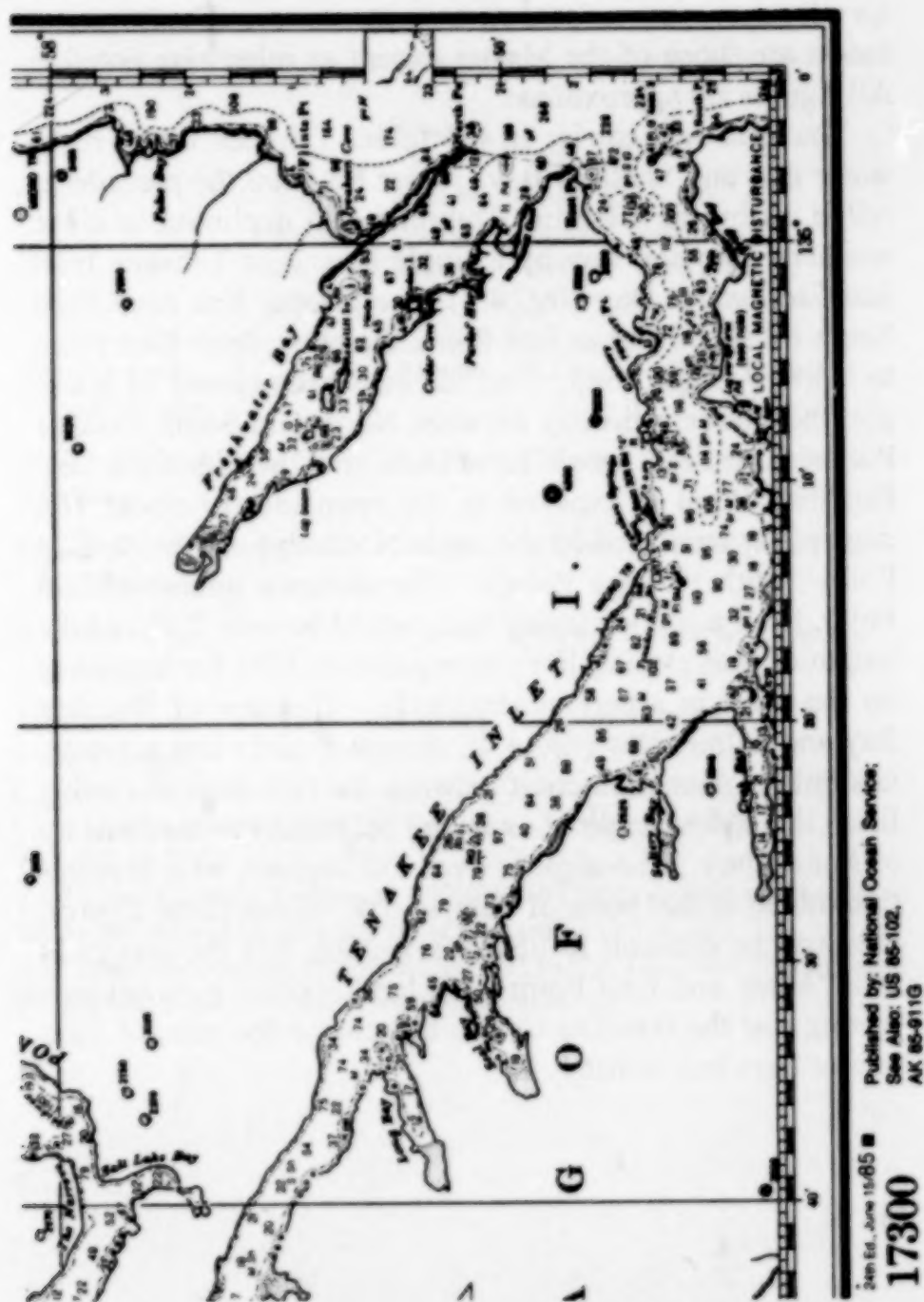


Figure 4.3. Tenakee Inlet and Freshwater Bay, Alaska.

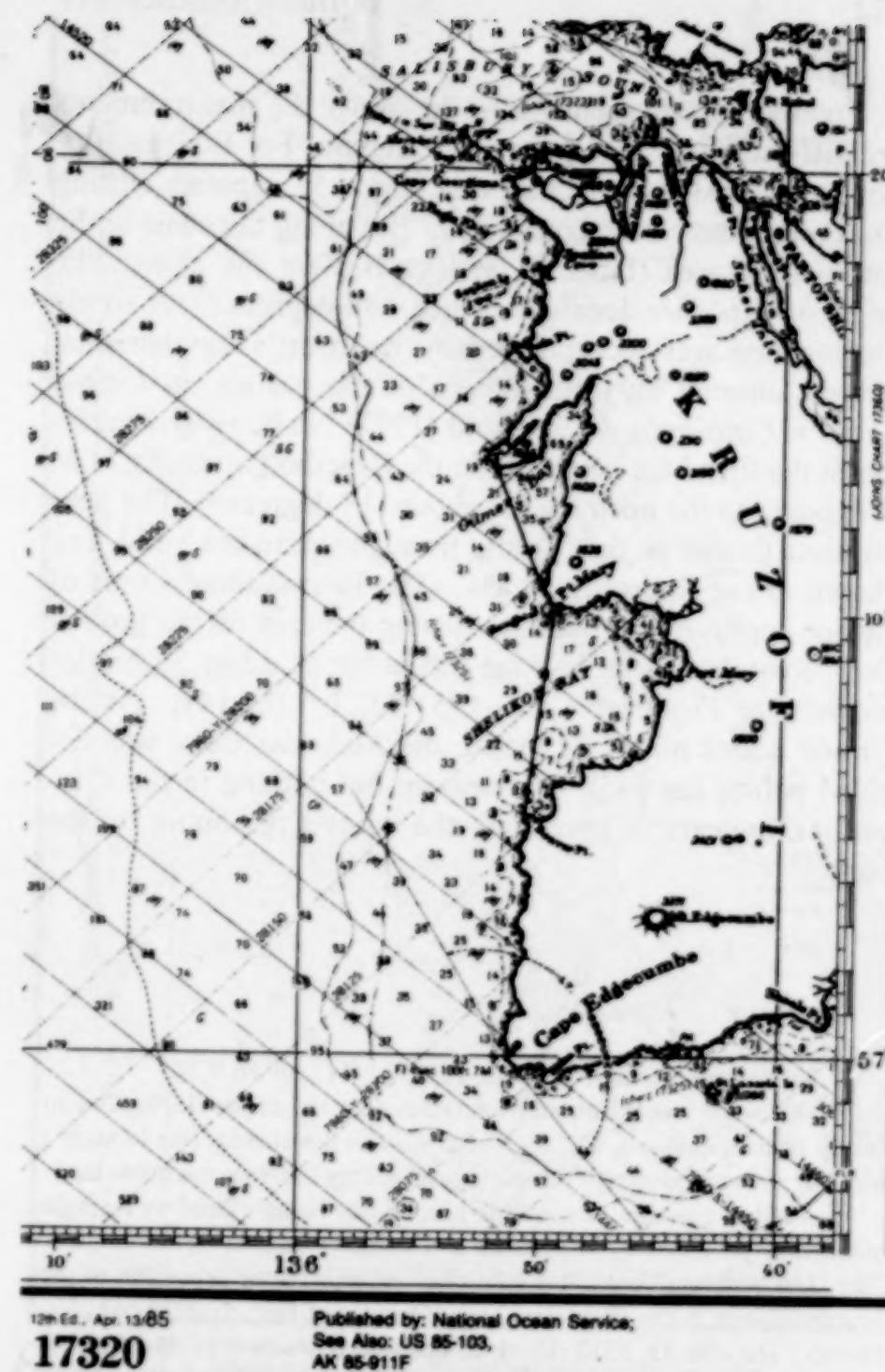


Figure 4.4. Shelikof Bay and Gilmer Bay, Alaska.

For the next two entries in the table, the measurements are different, and the results are different. For Bodega Harbor and Tomales Bay, California (fig. 4.5), separate closing lines might have been considered. But along the coast in the intervening area (labelled Bodega Bay on the chart), the angle of exposure does not exceed 106 degrees.⁶³ A single closing line was incorporated in the Court's supplemental decree, entered on joint motion of the parties, in *United States v. California*, 432 U.S. 40 (1977). In Norway, a mariner at the tip of the peninsula in the Svaerholthavet (fig. 4.6) is exposed to the open sea for about 115 degrees.⁶⁴ The penetration inland at that point, from the seaward solid line shown in the figure, is 29.8%. The International Court of Justice approved the baseline closing the area on the ground that "Svaerholthavet has the character of a bay." Anglo-Norwegian *Fisheries Case*, 1951 I.C.J. 116, 141. As the United States notes, Tr. 3626, the *Fisheries Case* was decided before the 1958 Convention; but nothing in the Convention appears to invalidate the court's reasoning on the point.⁶⁵

⁶³ The maximum occurs at about 122°59.5' W., 38°16.9' N.

⁶⁴ This angle was measured from the eastern end of the closing line to the tip of the peninsula, and then northwest to the closing line in such a way that the second side of the angle just touches but does not cross land.

⁶⁵ Another example of a double-headed bay being closed by a single baseline is provided by Albemarle and Pamlico Sounds in North Carolina. The Baseline Committee combined the pair on the precedent of the Svaerholthavet in the *Fisheries Case*. Minutes of Dec. 7, 1970 (Ak. Ex. 85-105); see also Tr. 3212-15. I do not take this action of the Baseline Committee into account, however, because the geographical situation on the North Carolina coast is distinguished by the presence of barrier islands. See Tr. 3286-87, 3613-14, 3626.

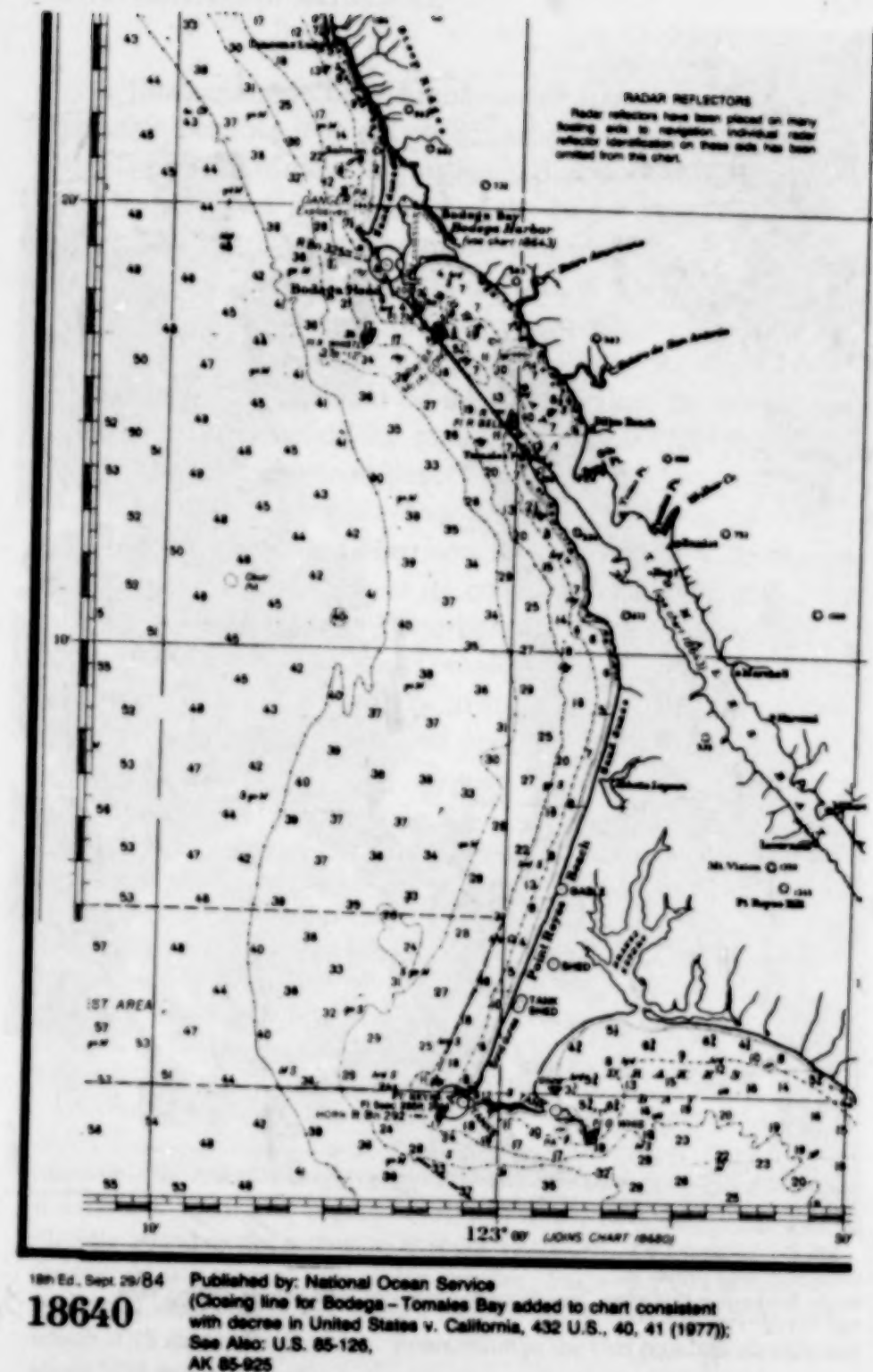


Figure 4.5. Bodega Harbor and Tomales Bay, California.



Excerpt of Map Annex III,
Anglo Norwegian Fisheries Case (adopting seaward solid line as closing line),
1951 I.C.J. 116; 141;
See also; AK 85-922

Figure 4.6. Svaerholthavet, Norway.

A final example of a double-headed bay—omitted from the table because it is not so described by the parties or the Baseline Committee—is northern Harrison Bay (fig. 4.1). The Kogru River forms one arm, the larger rounded indentation to the north forms the other, and the two are joined by the peninsula ending at Saktuina Point.⁶⁶ Depending on the method of measurement, the maximum angle of exposure is at least 106 degrees, with a penetration ratio not over 33%.⁶⁷ If a semicircle is overlaid on the closing line, the proportion of land to water inside the semicircle appears comparable to that in southern Harrison Bay.

This comparison with other double-headed bays strongly suggests that southern Harrison Bay should be closed as a single bay. The waters at its coastline are exposed to the open sea for at most 112 degrees, within the general range represented by Bodega and Tomales Bays, northern Harrison Bay, and the Svaerholthavet. In southern Harrison Bay, natural entrance points are agreed upon, and there is no attempt to extend the closing line seaward of them. The area that

⁶⁶ Originally the Baseline Committee excluded the Kogru River from the area of the indentation and found that the indentation just failed the semicircle test. Minutes of July 27, 1970 (U.S. Ex. 85-116). Later the Committee received information that the Kogru River, despite its name, was a bay. With its inclusion, the semicircle test was satisfied, and the area was closed by a line from Cape Halkett to Atigaru Point. Draft minutes of Oct. 5, 1972 (Ak. Ex. 85-279). On this later analysis, the Kogru River clearly becomes an arm of northern Harrison Bay.

⁶⁷ The angle Cape Halkett-Saktuina Point-Atigaru Point, as measured on NOS chart 16004, is about 113 degrees. The actual exposure of Saktuina Point is somewhat less because of the nearby Eskimo Islands, but it measures about 102 degrees even taking the islands into account. Slightly inland on the peninsula, at about 152°8' W., the exposure taking the islands into account rises to 106 degrees. Saktuina Point and the inland point, respectively, are 5 and 6 nautical miles from the closing line, which is 18 nautical miles long. Penetration at the two points is therefore about 28% and 33%.

would be added to inland waters is roughly semicircular, with the defect only that some parts of the indentation are seaward of the circumference of a perfect semicircle. Other parts, landward of that circumference, are exposed for less than 90 degrees. Even at the most exposed point, there is penetration of 32.2%,⁶⁸ comparable to that in the other formations closed as a single bay. This is a measure of the minimum penetration of the indentation; the maximum penetration, by the various tests discussed in section D(2), *supra*, is at least 53% and by one measure 120%. I conclude that southern Harrison Bay has penetration in such proportion to the width of its mouth as to contain landlocked waters.

E. Conclusion

Since all the tests of the Convention are satisfied, I recommend that southern Harrison Bay be treated as a single bay with one closing line. In the terms of question 15, I recommend that the southern portion of the area shown as "Harrison Bay" on NOS chart 16064 be held a juridical bay, as contended by Alaska. The parties agreed on the closing line to be used in the event that this was the Master's recommendation. I further recommend that the location of the line enclosing the inland waters of the bay be that so agreed on.

⁶⁸ For supporting details, see *supra* notes 5 (description and length of single closing line) and 60 (location of most exposed point; distance to single closing line).

V DINKUM SANDS

Large sections of Alaska's Arctic coast are fringed by barrier islands. The principles governing federal and state rights in the presence of islands were considered at length in section III.

Dinkum Sands is a small formation in the leased area that may or may not qualify as an island. Question 5 of the Joint Statement asks:

Is the formation known as Dinkum Sands an island constituting part of Alaska's coast line for purposes of delimiting Alaska's offshore submerged lands?

The formation is shown in figure 1.1, at approximately 70°25.5' north latitude, 147°46' west longitude. It lies between Narwhal Island and Cross Island, four to five nautical miles from each, and within eight nautical miles of the mainland. The entrance to Prudhoe Bay is about ten nautical miles away.

If the answer to question 5 is yes, then Alaska owns a three-mile belt of submerged lands around Dinkum Sands. The area of this belt is roughly twenty-eight square miles. If the answer to question 5 is no, then Alaska's rights in the immediate vicinity are limited to three-mile belts around Cross and Narwhal Islands. See figure 3.2.¹

Hearings on question 5 were held from July 16 through August 2, 1984. The Inupiat Community of the Arctic Slope and the Ukpeagvik Inupiat Corporation participated as recommended intervenors, in accordance with the Special Master's Report of January 10, 1984. All parties submitted briefs in March 1985, and Alaska and the United States sub-

¹ This analysis assumes that waters landward of islands are not Alaska's on a theory of straight baselines or a theory of assimilation of waters to the territorial sea. I rejected these theories in section III, *supra*.

mitted reply briefs in May 1985.² Final argument on question 5 was held on June 18, 1986.

In addition, during a visit to Alaska in 1980, the Special Master traveled to Dinkum Sands by helicopter and ship in the company of counsel for the United States and Alaska. The trip included a landing on Cross Island on July 31 and, on August 1, the taking of soundings at Dinkum Sands from a small launch. The feature was submerged at the time.

A. The legal structure

Under the Submerged Lands Act, 43 U.S.C. §§ 1301-1315 (1988), Alaska is entitled to a three-mile belt of submerged lands measured from its coastline. Under the Court's interpretation of the Submerged Lands Act in *United States v. California*, 381 U.S. 139 (1965), the term "coast line" is in general to conform to the baseline under the Convention on the Territorial Sea and the Contiguous Zone, done Apr. 29, 1958, 15 U.S.T. 1606, 516 U.N.T.S. 205 (entered into force 1964). See generally section II, *supra*.

The parties agree that, for Dinkum Sands to form part of Alaska's coastline for purposes of the Submerged Lands Act, the formation must be an island as defined in Article 10(1) of the 1958 Convention.³ Article 10 provides:

² In this section of the report, the briefs of Alaska and the United States are referred to as AB, USB, ARB, and USRB. The corresponding full titles are as follows: Opening Brief of Defendant State of Alaska Following Trial of Question 5 of the Joint Statement of Questions Presented; Post-Trial Memorandum for the United States on Issue 5; Alaska's Reply Brief on Question 5; and Post-Trial Reply Memorandum for the United States on Issue 5.

³ Alaska originally contended that the Convention is not controlling and that the language of the Submerged Lands Act should be applied directly. Joint Statement 14. The State later abandoned this contention. AB 2 & n.1.

1. An island is a naturally formed area of land, surrounded by water, which is above water at high tide.

2. The territorial sea of an island is measured in accordance with the provisions of these articles.

If Dinkum Sands meets the definition in Article 10(1), then its low-water line will be part of Alaska's baseline under the Convention.⁴ This consequence follows from Article 10(2), just quoted, and Article 3, which states:

Except where otherwise provided in these articles, the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State.

In the application of Article 10(1), the fundamental disagreement is over whether Dinkum Sands is "above water at high tide." Although other issues have been raised, such as the extent to which Dinkum Sands qualifies as "land" and the extent to which its characteristics must be permanent, these can most readily be treated as questions about aspects of the meaning and application of "above water at high tide."

If Dinkum Sands fails to qualify as an island, it may be only a submerged shoal, or it may be a low-tide elevation—a

⁴ If Dinkum Sands meets the definition in Article 10(1), the island itself (as opposed to the surrounding submerged lands) would be part of the public lands of the United States. Under sections 5 and 6(b) of the Alaska Statehood Act, the United States in general retained its public lands, and Alaska was entitled to select from them lands up to a certain acreage that were "vacant, unappropriated, and unreserved." Alaska Statehood Act, Pub. L. No. 85-508, 72 Stat. 339 (1958), reprinted as amended in 48 U.S.C. note preceding § 21 (1988). Alaska did attempt to select an area including Dinkum Sands, but its application was rejected on the ground that the area was already reserved. Ak. Exs. 84A-105 to -107; Tr. 1254-57.

feature that Article 11 of the Convention defines in part as "above water at low-tide but submerged at high tide":

1. A low-tide elevation is a naturally formed area of land which is surrounded by and above water at low-tide but submerged at high tide. Where a low-tide elevation is situated wholly or partly at a distance not exceeding the breadth of the territorial sea from the mainland or an island, the low-water line on that elevation may be used as the baseline for measuring the breadth of the territorial sea.

2. Where a low-tide elevation is wholly situated at a distance exceeding the breadth of the territorial sea from the mainland or an island, it has no territorial sea of its own.

If Dinkum Sands is either a submerged shoal or a low-tide elevation, the legal consequences are the same. Because it lies more than three miles from the nearest point on the coastline, status as a low-tide elevation would be insufficient to create Submerged Lands Act rights in Alaska. See generally *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 40-47 (1969).⁵ Instead, it would be subject to the jurisdiction and control of the United States under the Outer Continental Shelf Lands Act, 43 U.S.C. §§ 1331-1356 (1988 & Supp. V 1993).

B. Background of the dispute

The parties have introduced evidence of explorations of the Dinkum Sands area going back to the early nineteenth century. Modern charting of the area, however, may be

⁵ In 1988, the United States extended its territorial sea from a three-mile to a twelve-mile belt. Proclamation No. 5928, 3 C.F.R. 547 (1988), reprinted in 43 U.S.C. § 1331 note (1988). Although Dinkum Sands does lie within the twelve-mile belt, that appears to be immaterial in the present case. See *supra* section II, note 3.

dated to 1949-50, when the Coast and Geodetic Survey conducted a basic hydrographic survey extending from the Return Islands to the McClure Islands (fig. 3.2). U.S. Exs. 84A-224 and -225; Ak. Exs. 84A-201 and -203.⁶ Witnesses for both sides described the survey: for the United States, Mr. James Dailey, a cartographer with the National Ocean Service (the successor agency to the Coast and Geodetic Survey); and for Alaska, Admiral Harley Nygren, who as an ensign had served on the original survey party in 1949 and 1950. See Tr. 496-516 (Dailey), 1319-42 (Nygren).

In August 1949, the survey party encountered a formation that was described as "a new gravel bar baring about three feet." U.S. Ex. 84A-225 and Ak. Ex. 84A-203, at 3; see Tr. 1325-28, 1360-61. The party erected a survey target on the formation, Tr. 1328, 1332-33, 1363, which they named Dinkum Sands. Ak. Ex. 84A-202 (in 1950 addendum, at 4); Tr. 1337-38. Admiral Nygren photographed the formation in late August 1949, when it was an estimated three to four feet above sea level and had an area described as hundreds of yards long and hundreds of feet wide. Ak. Ex. 84A-204; Tr. 1330-32, 1362-63. The official record of the survey, or "smooth sheet," states that Dinkum Sands bares three feet at mean high water. U.S. Ex. 84A-224, Ak. Ex. 84A-201; see

⁶ A basic hydrographic survey, as defined by Shalowitz, "must be so complete and thorough that it does not need to be supplemented by other surveys, and it must be adequate to supersede, for charting purposes, all prior hydrographic surveys of the area. It must be adequately controlled by the best practicable means in current use; it must be sufficiently intense to discover and determine the least depths on all dangers to navigation; it must verify or disprove all dangers, critical depths, and other important features appearing on the charts or prior surveys; it must develop significant submarine features that may be useful to the navigator; and it must provide sufficient permanent control so that future revision surveys will require the establishment of a minimum of additional control." 2 Aaron L. Shalowitz, *Shore and Sea Boundaries* 240 (U.S. Dep't of Commerce Pub. 10-1, 1964). See also Tr. 594-97.

Tr. 499-500, 1329-31. See also 2 Shalowitz, *supra* note 6, at 87, 238 (describing smooth sheets).

Based on the survey of 1949-50, Coast and Geodetic Survey maps from the early 1950s show Dinkum Sands as an island. E.g., Ak. Ex. 84A-327; U.S. Ex. 84A-238. In 1955, however, an inspection of aids to navigation along the Arctic Coast was carried out by a Navy ship, the USS *Merrick*. The *Merrick* reported that Dinkum Sands and the survey target were "not there." U.S. Ex. 84A-241 and Ak. Ex. 84A-330(a), at 9.⁷ Accordingly, the Coast and Geodetic Survey revised its charts. Beginning with the second edition of charts 9472 and 9473 in April 1956, Dinkum Sands was shown as a low-tide elevation, indicating a navigational hazard that might not be visible to mariners. See U.S. Exs. 84A-242 and -243; Ak. Exs. 84A-332 and -333.

The next development came in 1970 as an action of the Baseline Committee, an interagency group charged with delimiting the United States' coastline and its territorial sea.⁸ Dinkum Sands was still charted as a low-tide elevation. However, Admiral Nygren, who was a member of the committee, recalled it as an island in 1949, Tr. 1369-73, and the committee apparently accepted his description, notwithstanding the *Merrick*'s report from 1955. Hence the committee approved a delimitation showing a three-mile belt of territorial sea around Dinkum Sands. Ak. Exs. 84A-205 and -210. See Tr. 1342-50, 1368-75; Ak. Ex. 84A-207.⁹

The delimitation became critical early in 1979, when federal and state officials recommended approval of a leasing

⁷ Alaska challenges the accuracy of this report on the basis of the *Merrick*'s log. See *infra* section D(1).

⁸ See *supra* section III at 166.

⁹ In 1983, after the joint monitoring project described below, the Baseline Committee changed its delimitation to show Dinkum Sands without a three-mile belt. See Ak. Exs. 84A-208, -209, -301; U.S. Ex. 84A-252.

map for a joint oil and gas lease sale in the Prudhoe Bay area. Ak. Ex. 84A-102. This map, which followed the Baseline Committee's approach, Tr. 1303, assigned ownership of the territory around Dinkum Sands to Alaska. The treatment was noticed by Dr. Erk Reimnitz, a marine geologist and Arctic expert with the United States Geological Survey, as he was reviewing an environmental impact statement concerning the lease sale. Tr. 919, 929-30, 1031. Dr. Reimnitz wrote in May 1979 to the Bureau of Land Management that the leasing map was based on old information and that "we have not seen Dinkum Sands exposed above water during the last 4 years." U.S. Ex. 84A-502; also in Ak. Ex. 84A-104. In response, in June 1979, the BLM informed the Alaska Department of Natural Resources that BLM proposed not to measure a three-mile belt from Dinkum Sands for purposes of leasing. Ak. Ex. 84A-103; Tr. 670, 672, 1250-51.

Several Alaskan officials visited the site on July 11, 1979, and found Dinkum Sands 3.5 to 4 feet above water. Ak. Exs. 84A-109 to -115. See also Tr. 1258-60 (2.5 to 5 feet above water), 1286-87. Both federal and state officials made later visits during the summer, finding the formation sometimes above water and sometimes below. See section D(2) *infra*.

Recognizing the difficulty of determining whether Dinkum Sands was an island, the parties commissioned a jointly funded study to determine the formation's height relative to mean high water. Tr. 672-77, 1272-75, 1708-12. The study was budgeted for more than \$2.5 million. Tr. 677. As one part of the study, the parties hired a private contractor to survey Dinkum Sands, and this surveyor took topographical profiles of the feature in March, June, and August of 1981. U.S. Exs. 84A-302 to -304. For the other part, which was to determine the mean high water level, the parties contracted with the National Ocean Survey (now the National Ocean Service), which installed tide gauges and took tidal measurements in 1980 and 1981. U.S. Ex. 84A-400. The outcome

of this two-part "joint monitoring project" will be examined in detail in section E.

C. The high water datum

1. Interpretation of "high tide" as mean high water

Article 10 of the 1958 Convention defines islands as "above water at high tide," but it does not define high tide. Although various definitions could be offered, the parties agree that, under well-established United States practice, "high tide" is to be understood as "mean high water." See USB 30-31; AB 63; Tr. 3362, 3404, 3406. For example, in *United States v. California*, which first applied the Convention in a Submerged Lands Act case, the decree provided:

As used herein . . . "[i]sland" means a naturally-formed area of land surrounded by water, which is above the level of mean high water.

382 U.S. 448, 449 (1966).

The Court has also used mean high water to define the limits of a federal patent of land bordering the ocean. In *Borax Consolidated v. Los Angeles*, 296 U.S. 10 (1935), reprinted in 2 Shalowitz, *supra* note 6, at 646, the Court found that under the common law the boundary was at "the line of ordinary high-water mark." *Id.* at 23. Then it examined the meaning of that term, and it gave some necessary scientific background:

The range of the tide at any given place varies from day to day, and the question is, how is the line of "ordinary" high water to be determined? The range of the tide at times of new moon and full moon "is greater than the average," as "high water then rises higher and low water falls lower than usual." The tides at such times are called "spring tides." When the moon is in its first and third quarters, "the tide does not rise as high nor fall as low as

on the average." At such times the tides are known as "neap tides." "Tidal Datum Planes," U.S. Coast and Geodetic Survey, Special Publication No. 135, p. 3 [1927].

....
In determining the limit of the federal grant, we perceive no justification for taking neap high tides, or the mean of those tides, as the boundary between upland and tideland, and for thus excluding from the shore the land which is actually covered by the tides most of the time. In order to include the land that is thus covered, it is necessary to take the mean high tide line which . . . is neither the spring tide nor the neap tide, but a mean of all the high tides.

In view of the definition of the mean high tide, as given by the United States Coast and Geodetic Survey, that "Mean high water at any place is the average height of all the high waters at that place over a considerable period of time," and the further observation that "from theoretical considerations of an astronomical character" there should be "a periodic variation in the rise of the water above sea level having a period of 18.6 years," the Court of Appeals directed that in order to ascertain the mean high tide line with requisite certainty in fixing the boundary of valuable tidelands, such as those here in question appear to be, "an average of 18.6 years should be determined as near as possible." We find no error in that instruction.

296 U.S. at 23, 26-27 (footnotes omitted). See also 1 Shalowitz, *supra* note 6, at 84-97 (1962) (giving background on the tide and commenting on the *Borax* case); H.A. Marmer, *Tidal Datum Planes* (U.S. Dep't of Commerce, Special Pub. No. 135, rev. ed. 1951) (U.S. Ex. 84A-404).

As the Court indicated, the tide varies with the phase of

the moon and other astronomical forces. Shalowitz explains that 19 years represent a full tidal cycle:

Although tidal constants and tidal datum planes may be established (within certain limits of accuracy) from observations extending over a month or a year, for the demarcation of valuable tidelands or for scientific purposes continuous observations extending over a period of 19 years are required. This period is generally reckoned as constituting a full tidal cycle because the more important of the periodic tidal variations due to astronomic causes will have gone through complete cycles, and because the variations of a nonperiodic character resulting from mete[o]rological causes may be assumed to balance out during this epoch.⁴⁰ It is therefore customary to regard results derived from 19 years of tide observations as constituting mean values.

⁴⁰ The 19-year cycle reflects the full effect on the time and range of the tide due to the variation in the longitude of the moon's node which has a period of 18.6 years.

2 Shalowitz, *supra* note 6, at 58–59. Given that “high water” is “the maximum height reached by each rising tide” (Marmer, *supra* page 235, at 1), mean high water is then defined as the average height of the high waters over a 19-year period. Marmer at 86; 2 Shalowitz at 66. The rounding up from 18.6 years to 19 years prevents seasonal fluctuations within a year from affecting the mean. Tr. 801–02.

2. Conditions in the Beaufort Sea

The range of tide in the Beaufort Sea is about 6 inches, very small in comparison to most lower-latitude tides. Tr. 781, 852–54, 1967–68, 2008.¹⁰ Besides the variation in the

¹⁰ The range of tide, variable from day to day, is defined as “[t]he difference in height between a high water and a preceding or succeeding low

water level due to astronomical factors, however, there is also considerable variation due to meteorological factors. Tr. 772–74, 951–54, 1970–71, 2014, 2285–87; Ak. Ex. 84A-607. Nautical charts of the Dinkum Sands area carry the following legends:

TIDES: The periodic tide has a mean range of about one-half foot.

CAUTION: Mariners are advised that in the shallow waters of the Beaufort Sea, water levels are strongly influenced by meteorological conditions. Strong offshore winds can produce water depths up to 0.8 meters (2.6 feet) less than those shown on this chart.

E.g., NOS Chart 16061 (6th ed. 1983) (U.S. Ex. 84A-252; Ak. Ex. 84A-301). Shalowitz states the relationship between tide and weather in terms of the concept of sea level:

Mean sea level at any place is the mean level of the sea at that place. It is the primary tidal datum plane and may be defined as the average height of the surface of the sea for all stages of the tide for a 19-year period, usually determined from hourly height readings. Sea level is the level of the sea from which the tide rises and falls, that is, it is the level of the sea freed from the rise and fall of the tide. Or stating this in another way, the daily rise and fall of the tide, which is of astronomic origin, is superimposed upon the daily variation in sea level brought about primarily by changing meteorological conditions.

2 Shalowitz, *supra* note 6, at 62–63 (footnote omitted).

The evidence indicates that, in the Beaufort Sea, much of the variation in sea level is seasonal. During the open water season, about July through September, sea level may be as

water.” Marmer, *supra* page 235, at 1. For comparison, the average range of tide at Boston is 9.4 feet; in Los Angeles Harbor, 3.8 feet; and at Seattle, 7.6 feet. *Id.* at 6.

much as 1 to 1.5 foot higher than the lowest levels of the year. See figure 5.1; Ak. Ex. 84A-802 (showing monthly mean sea level in the Beaufort Sea for several different locations and years); Tr. 1971-78, 1981-82, 2020-23.¹¹ The factors accounting for these changes include wind patterns, barometric pressure, and the expansion of sea water as its temperature rises. Tr. 773, 951-54, 1959-60, 2017, 2033. As to wind patterns, the evidence was that winds from the west, tending to raise the water level, occur mainly in September, whereas winds from the east prevail during the summer and tend to lower the water level. Tr. 951-52, 1803-04, 1868-69. See also Tr. 466-67, 479. In addition to the seasonal changes, there also appears to be considerable variation in sea level from one year to another, so that averages for corresponding months of different years may differ significantly. See Ak. Exs. 84A-702, -803; Tr. 1982-86, 2008, 2070-71.

Apart from any year-to-year differences in the level of the Beaufort Sea, it seems clear that season-to-season changes are much greater than the changes twice daily between high and low tide. As a result, a formation could be regularly above the high tides of the day during some parts of the year and regularly below the high tides of the day during other parts. Indeed, it could sometimes be exposed at all stages of the tide and at other times submerged at all stages of the tide. Neither condition is enough to establish whether the feature

¹¹ In figure 5.1 and Ak. Ex. 84A-802, the means have been calculated month by month but have not been combined into a single figure representing the mean over a whole year or period of years.

The seasonal variation in the Beaufort Sea appears to be comparable to that of lower latitudes. See Marmer, *supra* page 235, at 50-58, which examines the coasts of the conterminous United States and the Pacific coast of Alaska. Marmer finds that monthly sea level is "subject to an annual variation with a range up to a foot," *id.* at 58. The variation in monthly high water levels during the year is similar. *Id.* at 83.

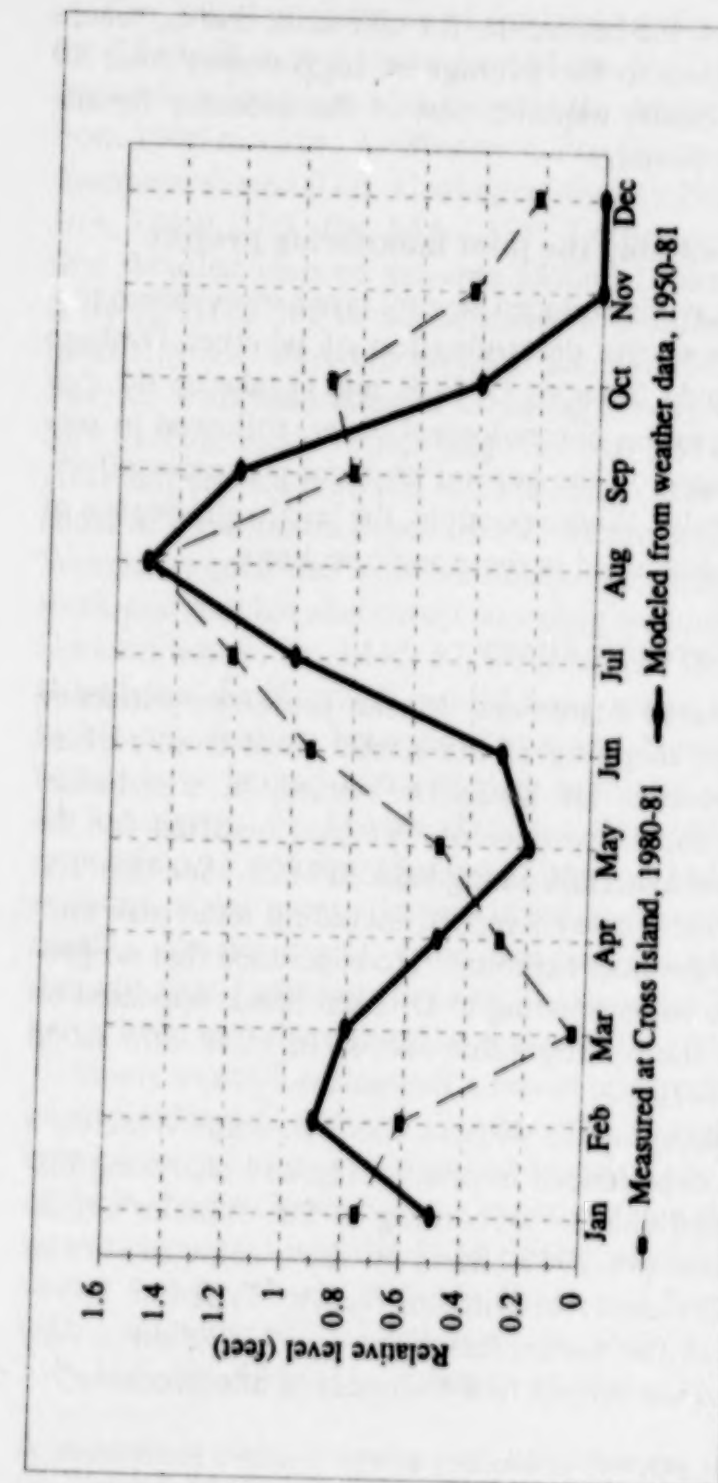


Figure 5.1. Seasonal variation in sea level (adapted from Ak. Ex. 84A-802). Data on average sea level, by month, from measurements at Cross Island in 1980-81 (broken line) and from a model based on weather data for 1950-81 (solid line). The lowest level from either source was given an arbitrary height of zero feet. The highest level is about 1.5 foot above the lowest.

is above or below the borderline for an island, that is, where it lies with respect to the average of high waters over 19 years. This difficulty explains part of the necessity for the joint monitoring project.

D. Evidence predating the joint monitoring project

The parties have introduced several types of evidence that may contribute to the determination of whether Dinkum Sands is an island. Sections D, E, F, and G take up the evidence that falls into a chronological order, followed in section H by evidence on the general physical processes affecting Dinkum Sands. Where possible, the legal significance of the evidence is evaluated in these same sections.

1. *The cartographic history*

Both the United States and Alaska presented extensive evidence on the mapping of the Arctic coast from earliest times to the present. Dr. Louis De Vorsey, Jr., a historical geographer at the University of Georgia, testified for the United States on materials dating back to 1823. *See* U.S. Ex. 84A-101 (Dr. De Vorsey's report, including letter-size copies of many of the map exhibits). He concluded that no geographic feature corresponding to Dinkum Sands appeared on any map until the hydrographic survey of 1949-50. *Id.* at 14-15; Tr. 373-75.

Alaska's cartographic witness was Mr. John Winzler, a civil engineer experienced in researching and analyzing historical maps and charts. According to Mr. Winzler's testimony, numerous pre-1949 charts do show some feature or features in the vicinity of Dinkum Sands. Tr. 1405, 1554-55.¹² Many of the earlier maps, however, are on a very small scale and are subject to differences in interpretation.

¹² *See* Ak. Ex. 84A-343 (a summary of Mr. Winzler's presentation, to be used as an overlay on the current charts in Ak. Ex. 84A-301). *See also*

The fullest exploration of the Dinkum Sands area, prior to the 1949-50 survey, was carried out by Ernest de K. Leffingwell, a geologist who traveled the Arctic coast of Alaska from 1906 to 1914. Leffingwell, *The Canning River Region, Northern Alaska* (U.S. Geological Survey Professional Paper 109, 1919) (U.S. Ex. 84A-135). Leffingwell produced the first detailed map of the area around Dinkum Sands, on a scale of 1:125,000 or about 1 inch to 2 miles. *Id.*, plate IV (also U.S. Ex. 84A-115 and Ak. Ex. 84A-313); Tr. 361-62. Several witnesses attested to the generally high quality of Mr. Leffingwell's work. E.g., Tr. 448, 574-76, 1073-74. His chart shows, between Narwhal and Cross Islands, only a shoal at a minimum depth of 2.25 fathoms (13.5 feet). Mr. Winzler argued that poor visibility hampered Leffingwell's work and that his shallowest sounding was not necessarily at Dinkum Sands, Tr. 1445-53, whereas Dr. De Vorsey maintained that Leffingwell would have made every effort to locate any feature between Cross and Narwhal because it would have helped him establish mutually visible beacons for his survey. Tr. 364-65; U.S. Ex. 84A-135 at 15 ("It was impossible . . . to carry the line of beacons to Cross Island on account of its great distance from the next island to the east"). Dr. Reimnitz, from the Geological Survey, also thought that Leffingwell would have seen Dinkum Sands had it been anywhere near the surface. Tr. 1043.

In any event, Leffingwell's report apparently became the basis for later Coast and Geodetic Survey charting of the area between Cross and Narwhal Islands. Mr. James Dailey of the National Ocean Service explained that the 1919 report was incorporated into the 1928 edition of chart 9400, which shows a stippled area between Cross and Narwhal, marked with a sounding of 2.25 fathoms. Tr. 564-65; Ak. Ex. 84A-319; U.S. Ex. 84A-211. Editions up through 1950 are simi-

the appendix to Alaska's opening brief, which contains an extremely useful, though incomplete, summary of both parties' cartographic evidence.

lar. U.S. Exs. 84A-120 to -123, -212 to -216. Although there was some disagreement over the interpretation of these charts,¹³ Alaska acknowledges that the maps prior to the 1949-50 survey are inconclusive as to whether the features shown are islands, low-tide elevations, or submerged shoals. Tr. 3424, 3448.

The 1949-50 hydrographic survey, which found Dinkum Sands 3 feet above mean high water, was described *supra* pages 231-32. The United States does not dispute the accuracy of the survey. USRB 7-8. Following the survey, Dinkum Sands was charted as an island in the early 1950s. U.S. Exs. 84A-224, -235, -236, -238, -239; Ak. Exs. 84A-201, -324, -325, -327, -328; *see* Tr. 510-15, 1514-18, 1611-12.

Two later reports formed the basis for the subsequent mapping of Dinkum Sands as a low-tide elevation. In 1955, as already noted, the USS *Merrick* reported that the island and survey target were "not there." *See supra* page 232; Tr. 516-20, 610-20, 1520-21. Alaska raised doubts about the *Merrick*'s report, arguing from the ship's log for August 17 and 18, 1955, that observations were impeded by dangerous ice conditions and a strong southwest wind (tending to raise the sea level significantly). Mr. Winzler also reconstructed the *Merrick*'s course, finding that its nearest distance from Dinkum Sands was just under three nautical miles. Ak. Ex. 84A-330(b) and (c); Tr. 1521-40, 1666-67, 1691-1700. On the other hand, the *Merrick*'s report stated that comments about aids to navigation had been made "only when the aid was definitely sighted or definitely absent. When visibility or the distance of the ship from shore prevented certain

¹³ Dr. De Vorsey said that stippling indicated a shoal. Tr. 359, 398-99, 415-16. Mr. Winzler, on the other hand, interpreted the feature on the 1928 chart as above water and the placement of the sounding only a matter of cartographic convenience. Tr. 1498-99, 1602-03. He also noted that earlier charts had shown Narwhal, Cross, and other islands with similar stippling. Tr. 1653.

knowledge of the condition of the aid, no comment was made." U.S. Ex. 84A-241 and Ak. Ex. 84A-330(a), enclosure 2, at 1; Tr. 518, 614. The United States also brought out that two small boats from the *Merrick* went within two miles of the charted location of Dinkum Sands. These boats were sent to help another ship, the USS *Archer T. Gammon*, that had become grounded on a shoal. Tr. 1697-1700.

In 1976, another report resulted from a joint project of the Coast Guard and the National Ocean Survey, one of whose purposes was "[t]o investigate all charted landmarks" along the Alaskan Arctic coast. U.S. Ex. 84A-246. The investigation was done by 300-foot helicopter flights, covering the Dinkum Sands area in mid-August 1976. *Id.* Commander Ned Austin of the NOS reported of Dinkum Sands, "Couldn't find island." *Id.*; Tr. 533-35, 588, 1546-47.

It was on the basis of the *Merrick*'s report, and later that of Commander Austin, that the Coast and Geodetic Survey changed its charts, conservatively, to show Dinkum Sands as a low-tide elevation.¹⁴ As Alaska argues, the reports may be less than conclusive as to the actual status of Dinkum Sands in 1955 and 1976. Still they do suggest a considerable change in the feature from the time Admiral Nygren photographed it at an estimated 3 to 4 feet above water level in August 1949 (Ak. Ex. 84A-204).

Some later maps prepared by the United States Geological Survey and the Army Map Service do show Dinkum Sands as an island.¹⁵ Oddly, most of these maps purport to

¹⁴ *See* U.S. Exs. 84A-238, -239, -242 to -245, -247 to -252 (editions from 1955 to 1983 of charts 9472 and 9473, later numbered 16061 and 16046 respectively); Tr. 524, 620-25, 662-64, 1542-43. The charts also show where the *Gammon* was grounded in 1955, less than two miles from Dinkum Sands.

¹⁵ U.S. Ex. 84A-136 (1955); Ak. Ex. 84A-331 and U.S. Ex. 84A-700 (1955, revised 1977); Ak. Ex. 84A-334 (1958); U.S. Ex. 84A-132 and Ak. Ex. 84A-340 (1960, revised 1976); U.S. Ex. 84A-130 (1962).

be derived in part from the 1956 editions of charts 9472 and 9473, which showed Dinkum Sands as a low-tide elevation. The record discloses no other basis for their depiction of Dinkum Sands, *see* Tr. 1633-42, and neither party has attached much weight to it.

Alaska seems to attach significance to the facts that the Baseline Committee, beginning in 1970, delimited the territorial sea around Dinkum Sands as if it were an island and that the initial 1979 leasing map also showed a three-mile belt around Dinkum Sands as Alaskan waters. AB 107-08; ARB 52-53; *but see* Tr. 3427-28. Again, the factual basis for these maps was only that already described. *See supra* page 232. The drawing of the three-mile belt adds no further weight. As Alaska recognizes, Tr. 3412, the nautical charts showing this delimitation were inconsistent with the Convention, for they depicted Dinkum Sands as a low-tide elevation outside the three-mile limit of any other feature but with a territorial sea of its own. The initial leasing map simply followed the nautical charts.

In sum, although Dinkum Sands was concededly above mean high water at the time of the 1949-50 survey, USRB 7-8, the factual evidence underlying the cartographic record contains nothing to show that Dinkum Sands continued at that elevation in later years and some evidence that it was below water in 1955 and in 1976. The maps themselves (as distinguished from the underlying evidence) contribute nothing more.

2. Other observations

Besides evidence related to the mapping of Dinkum Sands, the record contains numerous reports of other observations in the area. Among these are descriptions given by Inupiat who live on the North Slope and are familiar with the sea around Cross and Narwhal Islands. One witness was

Mr. Thomas Napageak, a subsistence hunter who has traveled there as a whaling captain since 1972, usually for about four weeks in August and September. Tr. 474-76, 486-87. Mr. Napageak stated that he has regularly encountered a formation in the approximate location of Dinkum Sands, but he made clear that it is under water and cannot always be detected from a boat. Tr. 477-78, 485. Another witness, Mr. Horace Ahsogeak, remembered traveling in the vicinity many times, mentioning an occasion in 1938 in particular, and he testified that he had not seen an island or shoal between Cross Island and McClure [Narwhal] Island. Tr. 464-68; *see* Tr. 668.

Also entered into evidence, by agreement of counsel, were several transcripts of interviews with Inupiat. Ak. Exs. 84A-17 to -19; Inupiat Intervenor's Exs. 1 and 2; Tr. 665-68, 1390. Alaska calls attention to the interview with Mr. Andrew Oenga, who recalled camping on a sand bar in the area of Dinkum Sands in the late spring of 1934, while the ice was still secure enough for a dog team and sled. Ak. Ex. 84A-17 at 1-2; *see* Tr. 396, 424. At other times, however, Mr. Oenga said the feature "would surface up in low tide and then it would be gone on high tide." Ak. Ex. 84A-17 at 2.

Other observations of Dinkum Sands were reported by the United States' expert on the Arctic, Dr. Reimnitz. Before the present dispute arose, Dr. Reimnitz had visited the area each year from 1970 to 1973 and from 1975 to 1978. The 1970 visit took place in June; the others, in August and September. Each visit included observations on from two to seven separate days. During these times, Dr. Reimnitz had seen Dinkum Sands above water only once, on August 17, 1972. It was submerged again on August 18, 22, and 23. *See* U.S. Exs. 84A-301, -503; Tr. 914, 921-29, 1050-51.

The following table summarizes Dr. Reimnitz's observations of Dinkum Sands as above or below water. It also in-

cludes visits by various witnesses in 1979 and 1980, to be described in the paragraphs below.

**Height of Dinkum Sands Compared to Water Level
at Time of Observation**

	June	July	August	September
1970	below	—	—	—
1971	—	—	—	below
1972	—	—	mixed	—
1973	—	—	below	—
1975	—	—	—	below
1976	—	—	below	below
1977	—	—	below	below
1978	—	—	—	below
1979	—	mixed	mixed	above
1980	mixed	mixed	below	below

Note: The term "mixed" means that Dinkum Sands was observed both above water and below water during the same month.

Observations alone, of course, are not enough to say where Dinkum Sands lies with respect to mean high water. Beginning in 1979, when the present dispute arose, there were not only more frequent observations but also some attempts to judge the water level at the time.

During the summer of 1979, Dinkum Sands was seen both above and below water.¹⁶ It was highest when Alaskan officials made their first visit, on July 11. At this time sev-

¹⁶ U.S. Exs. 84A-301, -504, -507a, -507b, -512; Ak. Exs. 84A-109 to -122; Tr. 920, 930-34, 937-39, 941-42, 945-46, 949, 955-57, 1048, 1056-58, 1081-83, 1258-72, 1286-97, 1301, 1303-06, 1307-08.

eral small gravelly mounds were exposed, spaced over a distance of about 1000 to 2000 feet. The largest was 3.5 to 4 feet above water by one estimate, 2.5 to 5 feet above water by another. Ak. Ex. 84A-109 (photograph); Ak. Ex. 84A-110; Tr. 1259-60. Dinkum Sands was seen above water again intermittently until September.

Dinkum Sands was at its lowest during 1979, compared to the water level at the time, on July 25. See U.S. Exs. 84A-301, -504, -507a (photograph); Tr. 933-34, 937-39, 941-42, 945-46, 955-57, 1048, 1056-58. On that day, Dr. Reimnitz conducted a survey in which he found the highest spot to be 30 to 40 centimeters (1.0 to 1.3 foot) under water. U.S. Ex. 84A-504 at 4. According to a tide station some fifteen miles away, at Prudhoe Bay, the water level was then about 20 centimeters (0.66 foot) above mean high water.¹⁷ If the Prudhoe Bay reading were known to be applicable, this would place Dinkum Sands 10 to 20 centimeters (0.33 to 0.66 foot) below mean high water on July 25, 1979.

In 1980, the gravel surface of Dinkum Sands was seen under water on June 23 and above water on June 30, just before the ice broke up. It continued above water through July 7; it reappeared above water on July 27 and July 30. In between these times, and afterward through September, it was submerged. By early October it was again covered with ice.¹⁸

During 1980, there are no reports in evidence of tide readings from Prudhoe Bay, but there are several estimates

¹⁷ The Prudhoe Bay station showed the water level to be about 35 centimeters (1.15 foot) above mean lower low water. Since the range of tide is about 15 centimeters or 0.5 foot, this was about 20 centimeters (0.66 foot) above mean high water. See U.S. Ex. 84A-504 at 4.

¹⁸ U.S. Exs. 84A-301, -703. See also U.S. Exs. 84A-300, -507c, -507d; Tr. 695-96, 713-14, 720-22, 737-40, 742, 753, 934-37, 939-40, 942-43, 946-48.

of the distance of Dinkum Sands above or below water. The feature was apparently highest on July 2, 1980, when several patches of gravel were exposed with the largest, perhaps 2 feet by 6 feet, about 1 foot above water. U.S. Ex. 84A-703; U.S. Ex. 84A-301; Tr. 737-38. It was deepest on August 31, when Dr. Reimnitz made another survey and found the highest part to be 1 meter (3.28 feet) under water. U.S. Ex. 84A-301; Tr. 934-37, 939-40, 942-43. On September 14 he again measured the crest as 1 meter under water. U.S. Exs. 84A-301, -507c (photograph); Tr. 943, 946-47. The 1-meter depths are too large to account for by seasonal changes in the water level (about 1.5 feet) and by the range of tide (about 0.5 foot). There was no evidence of unusual weather conditions that would raise the water level. Accordingly, the 1980 reports tend to suggest, as did those for 1979, that Dinkum Sands is not consistently above mean high water.

E. The joint monitoring project

The joint monitoring project had two parts, as mentioned in section B: to determine the level of mean high water at Dinkum Sands, and to determine the elevation of Dinkum Sands itself. According to the report tying the results together, Dinkum Sands was below mean high water on each of the three occasions when it was surveyed in 1981. U.S. Ex. 84A-302, map 6.¹⁹

Alaska accepts the project findings about the elevation of Dinkum Sands, but it contests the findings as to the tidal datum. AB 73-74. In Alaska's view, the appropriate corrections would lower the mean high water level and would

¹⁹ The report included information developed by the contractors for both parts of the project. It was prepared by Alaskan officials and included comments by United States project inspectors. See U.S. Ex. 84A-302; Tr. 678-79, 702-03, 731-32, 782, 788-89, 1716-17.

show that Dinkum Sands was above mean high water at two of the three 1981 surveys. Alaska also contests the precision claimed for the finding of mean high water.

The United States accepts the project findings about mean high water, USB 71-72, but it disagrees with the findings about the elevation of Dinkum Sands. The United States would reduce the elevations found by two of the three surveys, bringing Dinkum Sands even farther below the level of mean high water.

I begin by reviewing the findings and how they were arrived at. The United States' objections are taken up in sections E(2) and F; Alaska's objections, in section E(3).

1. Determination of mean high water

The tidal datum part of the project was carried out by the National Ocean Service, acting as an independent contractor in consultation with representatives of both parties. See generally Tr. 672-78, 700-02, 756-60, 787-88, 1272-75, 1709-12; U.S. Exs. 84A-401 and -402; Ak. Exs. 84A-3 to -6. The collection of data for NOS analysis was subcontracted to Dr. Robert Lewellen, an earth scientist with Lewellen Arctic Research, who testified as an expert witness for Alaska. Tr. 701, 1274, 1796-98.

Although the datum would ideally have been computed from 19 years of tide readings, no American tide station in the Arctic had such a long series of data. Tr. 802. NOS represented that, with a year's readings, it could calculate the datum to an accuracy of plus or minus 3 inches. Tr. 675; see also Tr. 1274, 1711-12. Mainly to ensure that a full year of data would be available, five tide stations were originally proposed, with four to operate all year and one during the ice-free period. Tr. 758-60. After a station at Narwhal Island was destroyed by ice in September 1980, NOS said that the same accuracy could be achieved with one year of data

from Cross Island and three months from Dinkum Sands. Tr. 676; Ak. Ex. 84A-6, at 3.

Ultimately the project collected 17 station-months of data: 12 months from Cross Island, 4 months from Dinkum Sands, and 1 month from Narwhal Island. U.S. Ex. 84A-400, at 4. Beginning from readings taken every 6 minutes, *id.* at 2, NOS computed monthly averages of the high tide readings at Cross Island and averaged the monthly figures to find mean high tide for the year. *Id.* at 6-9; Tr. 769, 775-76, 830-31.²⁰ Using this figure as a surrogate for the 19-year average at Cross, NOS then arrived at a corresponding figure for Dinkum Sands by comparing the four months of simultaneous observations from the two stations. U.S. Ex. 84A-400 at 9; Tr. 777-79, 832.

The remaining question was how close these estimates of mean high water were to the values that would have been derived from a full 19 years of information. To reach an answer, NOS compared data from other tide stations—elsewhere in Alaska and in the Canadian Arctic—where longer data series were available. After extensive statistical analysis, it concluded that the value that would have been computed with 19 years of data was, with 95% probability, within plus or minus 0.206 foot (2.47 inches) of the value derived from one year of data. Tr. 875; *see* U.S. Ex. 84A-403; Tr. 857-79. That is, according to NOS, the true value of mean high water was almost certainly within about 2.5 inches of the estimate. Furthermore, according to NOS, there was a 68% probability that the true value was within half that distance from the estimate—within plus or minus 0.103 foot (1.24 inches). *See* Tr. 864, 868-69, 874-75.²¹

²⁰ As a possible alternative to this averaging, NOS considered using another method known as correction by tabular values. The two methods yielded very similar results. U.S. Ex. 84A-400 at 6-8; Tr. 776, 780-81.

²¹ The range within which the true value of mean high water is likely to lie, with some specific probability (or "confidence level"), has been

Before the level of mean high water could be compared with the elevation of Dinkum Sands, it was necessary to provide a common reference point. This purpose was served by a benchmark set at Dinkum Sands, which was given an assumed elevation of 50 feet. U.S. Ex. 84A-302, at 3. On that vertical scale, the value of mean high water was computed to be 51.88 feet. It is so shown on graphs reporting the final results of the joint project. U.S. Exs. 84A-302 to -304.

After the graphs were prepared, however, the NOS made a further review of its work and revised the estimate downward by 0.04 foot (about half an inch). The adjustments, which stemmed from problems with a tide gauge and a computer program, are not disputed. *See* Tr. 783-86, 791, 814-15; Ak. Exs. 84A-9, -10, -14; AB 77-78.

Accordingly, the value of mean high water estimated by NOS is 51.84 feet. By NOS's calculations, there is a 95% probability or confidence level that the true value of mean high water is within plus or minus 0.206 foot of the estimate. The true value would thus fall between 51.634 to 52.046 feet. These numbers are shown in figure 5.2.

referred to as the error band. *E.g.*, USB 64. The calculated error band was based on a common statistical measure, the standard deviation. If x is the estimated value for mean high water, the standard deviation is 0.103 foot, and the data follow a normal distribution, then the probabilities as to the true value of mean high water are as follows:

True value of mean high water, in feet	Probability
more than $x + .206$	2.5%
$x + .206$ to $x + .103$	13.5%
$x + .103$ to $x - .103$	68.0%
$x - .103$ to $x - .206$	13.5%
less than $x - .206$	2.5%

See, e.g., Michael O. Finkelstein & Bruce Levin, *Statistics for Lawyers* 118, 540 (1990).

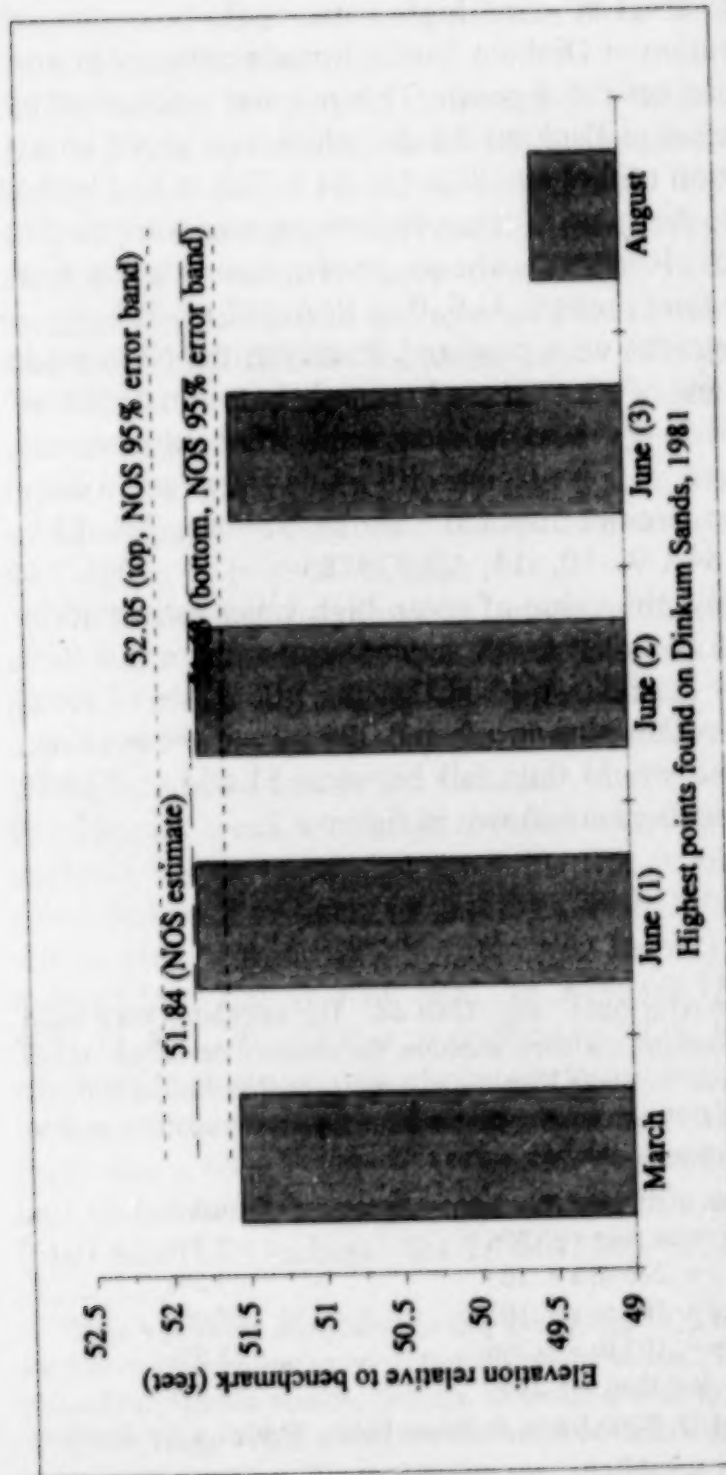


Figure 5.2. NOS estimates of mean high water and error band compared to 1981 measurements of Dinkum Sands. By the NOS estimate, at a 95% confidence level, mean high water lies a 51.84 feet plus or minus 0.206 foot. Of the 1981 measurements of the elevation of Dinkum Sands, all were below 51.84 feet, and only two were within the error band. All elevations are given relative to a benchmark with an assumed height of 50 feet.

2. Determination of the height of Dinkum Sands

The difficulty in determining whether Dinkum Sands lies above mean high water does not lie only in the measurement of the tidal datum. The joint monitoring project showed, as earlier observations also suggested, that the formation itself changes in elevation.

For the joint monitoring project, the task of surveying Dinkum Sands was contracted to F.M. Lindsey & Associates, an Anchorage surveying firm, with project inspectors appointed by both Alaska and the United States and with Dr. Lewellen as scientific coordinator.²² The surveyors measured the height of the formation three times: in March, June, and August 1981. Each survey was done under different conditions. Figure 5.2 summarizes the results.

In March, Dinkum Sands was under the winter ice pack. The surveyors covered the feature with a grid roughly half a mile long and 200 feet wide. At regular intervals on the grid, they drilled through the ice until reaching gravel and then measured the elevation of the gravel surface. About 270 holes were drilled altogether. The three apparent highest sites were also excavated for examination of the ice and soil content. Relative to the benchmark with an assumed height of 50 feet, the highest point found during the March survey measured 51.56 feet, or 0.28 foot below mean high water as later found by NOS (51.84 feet). See U.S. Ex. 84A-302 at 3; U.S. Exs. 84A-303 and -304; Tr. 679-89, 702-09, 1716-17.

The second survey was done on June 25, 1981, while the ice was melting and about to break up for the season. There

²² The same surveying firm, under contract to Alaska only, carried out a first topographical survey of Dinkum Sands in the spring of 1980. The 1980 profile, however, was not related to a tidal datum and so has not been relied on by either Alaska or the United States. See U.S. Ex. 84A-302 at 1-3; Tr. 1708-09, 1748.

were visible areas of gravel, and elevations were taken from the five highest such areas. The three highest readings were 51.82, 51.80, and 51.56 feet; the first two are barely below the NOS figure of 51.84 feet for mean high water. See U.S. Ex. 84A-302 at 4; U.S. Ex. 84A-304; Tr. 688-93, 709-12, 723, 724, 1718-21, 1750-51.²³

The third survey, on August 14, 1981, took place during the open water season. The entire formation was submerged. One measurement was taken from its apparent highest point, which was about 2.90 feet under water. On the scale used for previous surveys it measured about 49.57 feet, or 2.27 feet below the NOS figure for mean high water. See U.S. Ex. 84A-302 at 4-5; U.S. Ex. 84A-304; Tr. 731-37, 741-52, 1721-22, 1765.²⁴

In summary, the elevations all fall short of the NOS figure for mean high water, 51.84 feet. Although the two highest points in the June survey are very close, the others do not even reach the 95% error band defined by NOS, which begins from 51.634 feet and goes upward. See figure 5.2.

As the United States argues, it is very doubtful that the two highest measurements in June represent the true height of Dinkum Sands. The United States' witness on the March and June surveys was its project inspector, Mr. Jerry Pinkerton of the Bureau of Land Management. Tr. 677-78. Mr. Pinkerton testified that the two highest measurements in June

²³ Compared to the water level at the time of the June survey, the elevations of these three highest points were reported to be 0.02 foot (0.24 inch) above water, 0.02 foot below water, and 0.24 foot (2.88 inches) below water. U.S. Ex. 84A-302 at 4.

²⁴ The August measurement was reported to be accurate only to within plus or minus 0.20 foot; for it was tied to an observation of the surrounding water level, and a heavy swell was running at the time. U.S. Ex. 84A-302 at 5. This uncertainty is too small to matter, since in any case the high point was more than two feet below the NOS figure for mean high water.

were based on "very small pockets of gravel just setting [sic] on clear ice," Tr. 690, and he thought that they "were gravel that we had shovelled up on top of ice when we were there in March," Tr. 693. See Tr. 690-93, 711. Mr. James Spargo, who was Alaska's project inspector, Tr. 1710-11, agreed it was possible that the pockets of gravel could have resulted from the March excavations. Tr. 1751.

If the small gravel piles were indeed artifacts from the March survey, as seems likely, they should not be treated as contributing to the height of Dinkum Sands. I conclude that little or no weight can be given to the two highest measurements from the June 1981 survey.²⁵

3. Alaska's proposed adjustments to the tidal datum

a. Extent of the adjustments

Alaska contends that the NOS estimate of mean high water is too high and also that the NOS error band is too narrow. It says the correct best estimate of mean high water is at most 51.58 feet, as opposed to the NOS estimate of 51.84 feet. AB 91-93. In addition, Alaska would widen the error band from plus or minus 0.206 foot to plus or minus 0.6 foot. Figure 5.3 shows the proposed adjustments.

Alaska states that, with a value of 51.58 feet for mean high water, Dinkum Sands was above the datum in March and June 1981. AB 91; ARB 63-64. In asserting that the March survey of Dinkum Sands found an elevation higher than 51.58 feet, the State seems to be mistaken. As stated in the last section, the highest point located was 51.56 feet. It is true that, from the bar graphs on which the survey results were reported, the number cannot be read off accurately to

²⁵ Even if the gravel piles were formed naturally, the fact that they occurred on top of clear ice raises a further question. The problem of ice beneath surface gravel is discussed in section F, *infra*.

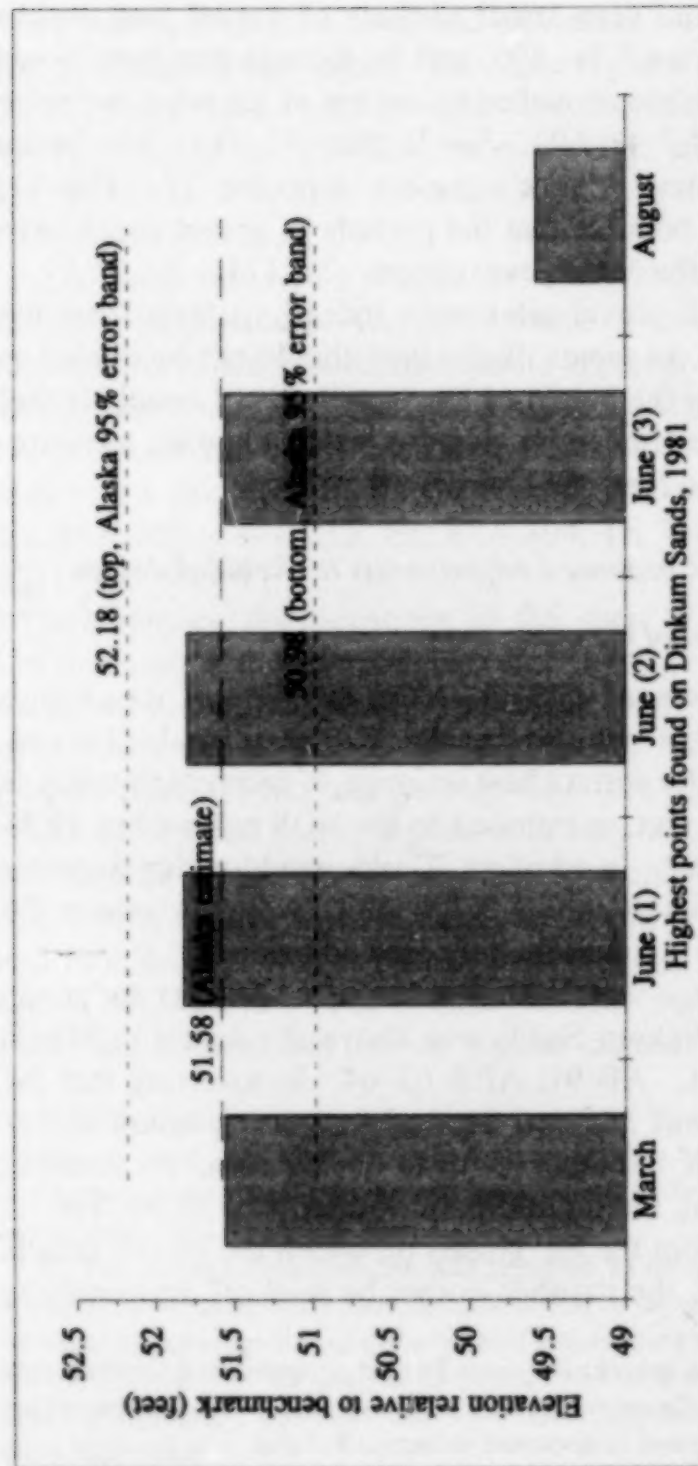


Figure 5.3. Alaska's estimates of mean high water and error band compared to 1981 measurements of Dinkum Sands. By Alaska's estimate, at a 95% confidence level, mean high water lies at 51.58 feet plus or minus 0.6 foot. Of the 1981 measurements of the elevation of Dinkum Sands, two were above 51.58 feet, and two more were within the error band. Elevations are relative to a benchmark with an assumed height of 50 feet.

the nearest hundredth of a foot. For the March survey, however, unlike the others, the highest elevations were also reported in figures. A diagram showing 51.56 feet as the highest March elevation is included on the same sheet as the bar graph. U.S. Ex. 84A-302, map 6; U.S. Ex. 84A-304 (larger scale copy of map 6). See also Tr. 689, 708-09.

For June, the two highest measurements are above Alaska's asserted value for mean high water (51.58), but these measurements are of the two gravel piles probably resulting from the March survey. The third highest June measurement is about the same as in March, 51.56 feet.

In principle, these observations are enough to dispose of the argument that Dinkum Sands was above mean high water during all or even most of the period covered by the 1981 surveys. Even if all of Alaska's proposed adjustments are accepted, so that the best estimate of the datum becomes 51.58 feet, the March and August surveys gave elevations below this number, and even in June the only elevations above 51.58 feet were based on questionable piles of gravel. The situation is summarized in the table on page 258, which brings together the data from figures 5.2 and 5.3.

Although all the uncontested measurements are below both estimates for mean high water, the measured elevations of 51.56 feet are very near Alaska's figure. I therefore do examine the particular adjustments to the tidal datum that Alaska proposes. These may be summarized as follows:

- 51.84 MEAN HIGH WATER (NOS figure)
- 0.20 for trend, to conform to the tidal epoch 1941-59 (or -0.06 to conform to the epoch 1960-78)
- 0.06 for abnormal weather
- 51.58 MEAN HIGH WATER (Alaska's figure)

**Estimates of Mean High Water and Error Band
Compared to 1981 Measurements of Dinkum Sands**

52.18	top of error band, 0.6 above MHW (Alaska's figure)
52.05	top of error band, 0.206 above MHW (NOS figure)
51.84	MEAN HIGH WATER (NOS figure)
51.82	highest measurement in June 1981 (contested)
51.80	second highest measurement in June 1981 (contested)
51.63	bottom of error band, 0.206 below MHW (NOS figure)
51.58	MEAN HIGH WATER (Alaska's figure)
51.56	third highest measurement in June 1981 (uncontested)
51.56	highest measurement in March 1981
50.98	bottom of error band, 0.6 below MHW (Alaska's figure)
49.57	single measurement in August 1981

b. The adjustment for trend

Although mean high water is defined as an average over a 19-year period, 19-year periods are not all alike. The average may differ from one period to another because of slow, long-term changes in the relationship of land and sea. See 2 Shalowitz, *supra* note 6, at 58–59; Marmer, *supra* page 235, at 63–64. Contributing factors may include both changes in the sea level, as by glacial melting, and vertical movements of the land. Tr. 1958, 2026–27; U.S. Ex. 84A-403, at 1.

It is generally accepted that sea level is rising globally at a rate of about 1.5 millimeters (0.005 foot) per year. Tr. 843–44, 1966–67, 2005; 45 Fed. Reg. 70,296, 70,297 (1980) (Ak. Ex. 84A-8).²⁶ Alaska complains that the NOS estimate

²⁶ Alaska introduced evidence of a more recent computation of the rate as 2.3 millimeters (0.0075 foot) per year. Tr. 2054, 2177.

of mean high water failed to take this long-term trend into account. Its argument depends on two points: first, that sea level is in fact rising at Dinkum Sands; and second, that the estimated tidal datum at Dinkum Sands should be adjusted back to an earlier time. A further question, to which I turn first, is the amount of any adjustment.

To make tidal datums comparable throughout the United States, the Federal Government recognizes specific nineteen-year periods as tidal epochs. 2 Shalowitz, *supra* note 6, at 58–59. The epoch in current official use is that from 1960 through 1978. It came into effect on November 28, 1980, replacing the epoch from 1941 through 1959. 45 Fed. Reg. 70,296 (1980) (Ak. Ex. 84A-8). To relate the mean high water figure computed from 1980–81 data to one of these epochs, one would adjust the figure to the midpoint of the epoch (either 1950, as the midpoint of 1941–59, or 1969, as the midpoint of 1960–78). Based on a global trend of a 1.5 millimeter rise in sea level per year, Alaska proposes a correction of –0.2 foot (2.4 inches) to take the mean high water figure back to its 1950 level, or –0.06 foot (0.72 inch) if the 1960–78 epoch is used. AB 83; Ak. Ex. 84A-806; Tr. 2002–07, 2008–09.²⁷

The parties agree that data published after November 28, 1980, would normally be related to the 1960–78 epoch. AB 82; USRB 26–27. Cf. Tr. 3370, 3433 (referring to the time the data were collected). Alaska acknowledges that the NOS figure for mean high water was first published in December 1981. Tr. 811–12; Ak. Exs. 84A-9, -14.²⁸ Accordingly, if

²⁷ The first proposed correction, if calculated more precisely, would be only –0.15 foot. Using the conversion factor of 1 meter = 3.281 feet, the 31-year period from 1950 to 1981 would have an assumed rise in sea level of 46.5 millimeters or .0465 meter or 0.153 foot.

²⁸ The underlying data had been collected at Cross Island from September 1980 through August 1981 and at Dinkum Sands from January 1981 through April 1981. U.S. Ex. 84A-400 at 4.

any adjustment were to be applied for trend, it would be the adjustment of -0.06 foot to conform to the 1960-1978 epoch.²⁹ By rejecting the adjustment of -0.2 foot, this conclusion eliminates the largest part of Alaska's proposed corrections to the tidal datum.

The remaining question is whether even the smaller adjustment of -0.06 foot should be made. NOS found, contrary to Alaska's point that sea level is rising at Dinkum Sands, that the trend in sea level there is unknown. Tr. 880, 893. The United States agreed with this position. USRB 29; Tr. 3366-67, 3453-56. The NOS report on the tidal datum explained:

An extremely important point . . . is that there are no long-term NOS tidal observations in the Beaufort Sea to determine the extent of long-term trends for the area. . . . Spatially, throughout Alaska where long series of observations are available, the long-term trends for sea level fluctuate immensely so it is not possible to make any assumptions about the trend in isolated areas. As an example, Sitka and Juneau are two relatively close NOS control tide stations in southeast Alaska which have extremely different long-term sea level trends. . . . It is obvious that a knowledge of the long-term sea level trend at one station provides no information about the trend at the other, and, in fact, any such assumption could be quite misleading.

²⁹ Alaska has argued for use of the 1941-1959 epoch on the theory that the rights of the parties became fixed, by agreement, at a time when that epoch was in effect. AB 82. As described to the Master, however, the agreement in question covers only "the location of . . . the formation known as Dinkum Sands and the three-mile projections" therefrom. Joint Statement 2. The description in the Joint Statement added: "There is, however, no agreement as to the controlling date or dates for determining whether Dinkum Sands is part of the coast of Alaska and that matter may be disputed." *Id.*

U.S. Ex. 84A-403, at 4. According to the same report, sea level at both Sitka and Juneau was falling, at the respective rates of 0.009 foot per year and 0.045 foot per year. *Id.* at 6. The NOS report indicates that most of the other long-term Alaskan tide stations also show a falling sea level. *Id.* at 5.

Alaska's principal witness on sea-level trend was Dr. Reinhard Flick, an oceanographer with the California Department of Boating and Waterways and the Scripps Institution of Oceanography. Related testimony was given by Dr. Douglas Inman, also an oceanographer at Scripps. Dr. Flick pointed out that the other Alaska tide stations referred to in the NOS report are all located on the Bering Sea or the Gulf of Alaska, in regions that are tectonically active so that the ground there may well be rising. See Tr. 2025-26; 2 Shalowitz, *supra* note 6, at 262 n.81. In contrast, the ground under the Beaufort Sea is tectonically stable. See Tr. 2026, 2246-47, 2252-53; Tr. 3435.

Furthermore, Alaska's witnesses testified, there are other tide stations closer to Dinkum Sands where the sea level is rising rapidly. Tuktoyaktuk, the nearest Canadian station on the coast of the Beaufort Sea, measures a rise in sea level of about 1 centimeter (0.03 foot) per year, more than six times the global rate. Ak. Ex. 84A-806 and -808; Tr. 1987-91. At Prudhoe Bay, where tide data were available for the open-water seasons from 1976 to 1983, sea level has risen by about 2 centimeters (0.07 foot) a year, twice even the rate at Tuktoyaktuk. Ak. Ex. 84A-608, -806, -807; Tr. 1995-99; Tr. [16] 5-11.³⁰

Dr. Flick agreed, however, that these were local trends in sea level, which can vary widely between adjacent stations.

³⁰ The hearing of August 2, 1984, was transcribed by a different reporter from the others and received a new page number series. The transcript does not carry a volume number, but it should have been labelled volume 16.

Tr. 1989-90, 1999-2000, 2025, 2035. At Prudhoe Bay, Dr. Inman suggested, the exceptional rate might reflect local subsidence of the ground as oil is pumped out. Tr. [16] 7. Another possibility was the melting of permafrost under the gravel dock (the ARCO pier of section VI) where the tide gauge is mounted. *Id.* NOS considered that the data series from Tuktoyaktuk, covering 6 years, was too short to be reliable. U.S. Ex. 84A-403 at 13-14.³¹ At Canadian Arctic stations that are farther away but have longer data series, sea level is falling. U.S. Ex. 84A-403 at 13.

Finally, Dr. Flick expressed the opinion that sea level in the Beaufort Sea is rising by at least the global rate of 1.5 millimeters per year. Tr. 2001-02. Dr. Inman agreed. Tr. [16] 8-10. However, in view of the evidence that the trend may vary locally not only in magnitude but in direction, and in view of the lack of evidence of trend specific to Dinkum Sands, I believe that NOS was justified in declining to take sea level trend into account in making its estimate of mean high water.

Even if the trend at Dinkum Sands were established, it is doubtful that an adjustment should be made. The reason for using uniform tidal epochs is to ensure national comparability of tidal data. 2 Shalowitz, *supra* note 6, at 59. That purpose is not pressing in this case. To adjust for trend would exaggerate the height of Dinkum Sands, as measured in 1981, by comparing it to a water level adjusted back to 1969. One might consider any trend in the height of Dinkum Sands as well as any trend in sea level, but this would not eliminate the exaggeration. Alaska presented testimony that barrier islands adapt to long-term increases in sea level by gaining in

³¹ Dr. Flick's data for Tuktoyaktuk covered a much longer period, but he agreed with NOS in describing the years 1962-67 as the longest stretch for which the data were relatively complete. See Ak. Ex. 84A-808.

elevation and migrating landward. Tr. 2262-63, 2309-10, 2312. If this process occurs at Dinkum Sands, then the formation's relationship to sea level should remain constant. On the other hand, if the process does not occur at Dinkum Sands, then it may be that the formation is gradually being inundated, and adjusting the sea level backward in time could prolong its legal status fictitiously. I therefore reject any adjustment for sea level trend.

c. *The adjustment for weather*

Alaska's other proposed correction is based on the proposition that, during the year of tide observations for the joint monitoring project, abnormal weather caused the water level around Dinkum Sands to be exceptionally high. Dr. Tim Barnett of the Scripps Institution of Oceanography, who appeared for Alaska as an expert in climatology and statistical modeling, presented a model that uses weather data to estimate changes in sea level. Tr. 2056-59. The general idea was that, as barometric pressure increases, sea level goes down. The weather data, from the National Weather Service, covered the period 1950-1980 and reported atmospheric pressure at an altitude of about 10,000 feet for locations at every 5 degrees of latitude and longitude. Tr. 2060-62.

Dr. Barnett first used the model to estimate monthly sea level changes at Cross Island; he found that it accounted for 55% of the variation observed there in 1980-81. Ak. Ex. 84A-701; Tr. 2066-67. This figure was described as very good performance for such a model. *Id.* Dr. Barnett then computed monthly and annual sea level averages for Cross Island for the years 1950 through 1981. Ak. Ex. 84A-702, -703; Tr. 2069-71, 2073-75.³² The conclusion was that

³² The monthly averages from Dr. Barnett's model are also shown in Ak. Ex. 84A-802(d) and in figure 5.1.

unusual atmospheric pressure in 1980-81 had led the sea level to be about 0.06 to 0.07 foot higher than normal. Tr. 2075. Alaska would therefore reduce the estimate of mean high water by 0.06 foot (0.72 inch).

The United States raises several technical questions about Dr. Barnett's method, for example whether the pressure at 10,000 feet is a good enough proxy for the pressure at sea level. In addition, the United States objects that the model takes into account only one factor affecting sea level and omits many others, including astronomical forces, winds, coastal currents, and changing ocean temperatures. It contrasts the traditional method of determining water levels by observation, which (in the long term) automatically reflects all the factors influencing these levels.

I do not find it necessary to decide whether the proposed adjustment should be adopted. If it were, it would reduce the best estimate of mean high water by 0.06 foot, bringing the NOS figure of 51.84 feet down to 51.78 feet. The situation this change would produce is shown in figure 5.4 and in the table following it.

The uncontested measurements of Dinkum Sands are below 51.78 feet. They are also below the NOS error band, whether or not the adjustment is made. If the NOS estimate of the error band is appropriate, then, according to the probabilities shown in note 21, there is less than a 2.5% chance that any of these measurements were above the true value of mean high water.

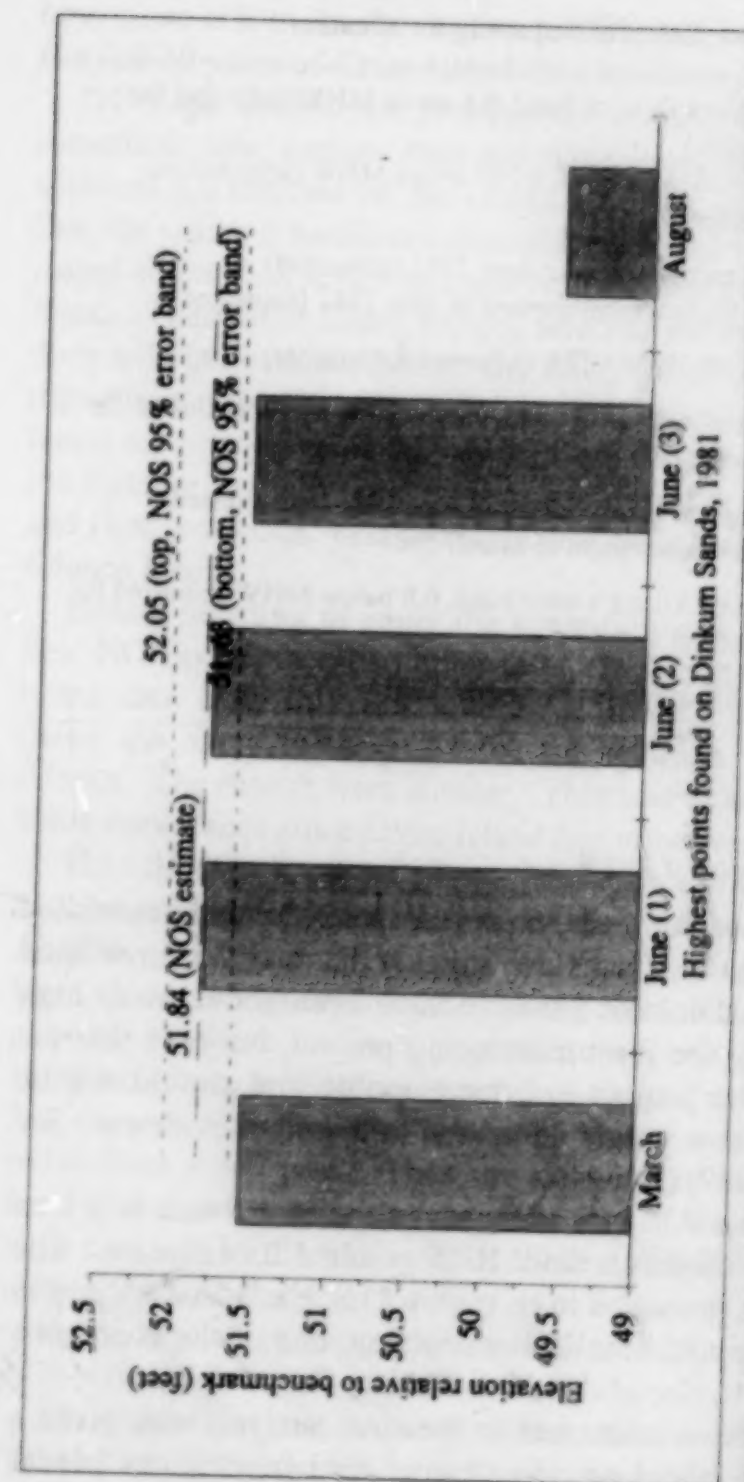


Figure 5.4. Mean high water adjusted for weather compared to 1981 measurements of Dinkum Sands. If only Alaska's adjustment for weather is adopted, the estimated value of mean high water becomes 51.78 feet. In this case, as in figure 5.3, two of the 1981 measurements of Dinkum Sands are above mean high water. Whether any others are within the 95% error band depends on which computation of the error band, ± 0.206 foot or ± 0.6 foot, is accepted.

Effect of Adjusting for Weather

52.38	top of Alaska's error band, 0.6 above MHW (adjusted for weather)
51.99	top of NOS error band, 0.206 above MHW (adjusted for weather)
51.82	highest measurement in June 1981 (contested)
51.80	second highest measurement in June 1981 (contested)
51.78	MEAN HIGH WATER (adjusted for weather)
51.57	bottom of NOS error band, 0.206 below MHW (adjusted for weather)
51.56	third highest measurement in June 1981 (uncontested)
51.56	highest measurement in March 1981
51.18	bottom of Alaska's error band, 0.6 below MHW (adjusted for weather)
49.57	single measurement in August 1981

d. The error band

Alaska also contends, however, that NOS underestimated the error band. It does not suggest that a wider error band would show Dinkum Sands to have been above mean high water during the joint monitoring project, but only that the results of the project are questionable and should not be given excessive weight compared to the other evidence. See Tr. 3430, 3437, 3445-46.

To explain Alaska's criticism of the error band, it is first necessary to indicate how NOS reached its estimate. The method was described in its report, U.S. Ex. 84A-403, and in the testimony of Mr. William Stoney, one of the coauthors. Tr. 856-901. See also USB 64-71.

The question addressed in the error analysis was, given a tidal datum based on one year of data from Cross Island,

how close is it to the datum that would have been computed if a full 19 years of Cross Island data had been available?

NOS approached the problem by looking at the nearest American tide stations that did have long data series. It selected six stations on the Gulf of Alaska and the Bering Sea, for which it had data series of from 8 to 34 years. It adjusted these data series to remove the effects of long-term trend. Then NOS asked for the selected stations, how well does a datum estimated from any one year of data represent the estimate obtained from a longer data series? The answer, based on an average of the results from the six stations, was the figure eventually used as the error band for Cross Island and Dinkum Sands: plus or minus 0.206 foot, at a 95% confidence level.

Before deciding to apply the same figure to the Beaufort Sea, NOS performed two other tests. In one test, NOS analyzed data from four tide stations in the Canadian Arctic, using the same methods as for the stations in southern Alaska. The results were similar. This was thought to be of some importance since Cross Island lies in between.

The other test involved comparisons between Cross Island and the southern Alaska stations. Although it was not possible to check directly on how well the one-year average from Cross Island represented a long-term average, it was possible to check on an analogous question: if a datum is computed from a short series of data from Cross Island (a few days or a few weeks), how well does that represent the result from a full year? Then the same question was posed for the southern Alaska stations. The results were similar in both cases. On the basis of all these computations, NOS concluded that the error band of plus or minus 0.206 foot could be applied at Cross Island and Dinkum Sands. See Tr. 877; U.S. Ex. 84A-403 at 9, 16-17.

Dr. Barnett, whose weather model was described in the last section, criticized the error band computation on several

grounds. Tr. 2143-76, 2206-12, 2220-23. Most important, he took the position that data from tide stations in southern Alaska and in Canada were entirely irrelevant. Tr. 2144-46, 2165, 2172, 2221-23. He asserted that the Cross Island data alone, one year's worth, could and should be used to estimate the result from nineteen years. Tr. 2222-23. Taking the monthly averages for the tidal datum at Cross Island as twelve independent observations, Dr. Barnett found the error bound at the 95% confidence level to be about plus or minus 0.25 foot. Tr. 2161-62. In his opinion, however, a proper analysis would show the number of independent observations to be considerably smaller, with an increase in the 95% error bound to about plus or minus 0.6 foot. Tr. 2162-64, 2170-71, 2206-07. He had not performed the computations needed to give the figure exactly. Tr. 2161, 2163, 2207.³³

On the basis of this testimony, Alaska maintains that the error band should be enlarged to plus or minus 0.6 foot. The United States defends the NOS estimate. The fundamental issue appears to be the probative value of different classes of data: a year's data from Cross Island, which may or may not support inferences about the long-term mean; and long-term data from other stations, which may or may not support inferences about Cross Island. The statistical theory and the physical science that would bear on this issue have not been fully spelled out.

Fortunately, it is unnecessary to resolve the size of the

³³ Dr. Barnett's estimates used the *t*-distribution, which is similar to a normal distribution but allows for greater variability when the estimate is based on a small sample. See generally David W. Barnes, *Statistics as Proof* 257-60 (1983); Finkelstein & Levin, *supra* note 21, at 224-25, 227. Alaska brought out that the *t*-distribution has been employed in one of NOS's own publications. Tr. 2156-59; Robert L. Swanson, *Variability of Tidal Datums and Accuracy in Determining Datums from Short Series of Observations* 8 (National Oceanic & Atmospheric Admin. Tech. Rep. NOS 64, 1974) (Ak. Ex. 84A-707).

error band. The controlling point is the estimate of mean high water, for whatever the width of the error band, the chance that the estimate of mean high water is too high is matched by an equal chance that it is too low. Although there may be more or less uncertainty about how accurate the estimate would prove to be after 19 years of observation, it is the best estimate now available.³⁴ The uncontested measurements of Dinkum Sands in 1981 are below the estimate.

F. The composition of Dinkum Sands

According to the topographic surveys made in 1981, the elevation of Dinkum Sands dropped about 2 feet during the survey period. In March and June 1981 the highest uncontested measurements were about 51.6 feet; in August 1981 the high point was about 49.6 feet. See *supra* section E(2).

The United States attributes this decline largely to the melting of ice embedded in the formation. It argues that under the Convention an island must be a "naturally formed area of land," that ice is not land, and that the elevation of Dinkum Sands must therefore be discounted accordingly. At final argument the United States clarified its position so as to distinguish between embedded ice that melts seasonally, for which it would discount the elevation, and ice at deeper levels that remains frozen permanently, which it conceded could be treated as land. Tr. 3338-41.³⁵

³⁴ The United States points out that, when the parties agreed on a one-year joint monitoring project, they consciously gave up some precision of result for the sake of reasonable time and expense. USRB 30-31.

³⁵ Both sides agree that ice on the surface of the feature does not increase its elevation. In the 1981 surveys, elevations were measured from the highest gravel encountered, regardless of whether it was exposed, under ice, or under water. See *supra* section E(2); U.S. Ex. 84A-302.

1. Evidence from 1981

The main evidence of the ice content of Dinkum Sands comes from the March 1981 survey. Mr. Pinkerton, the United States' project inspector, testified first as to excavations at the apparent highest points of the feature:

The original gravel that we encountered seemed to be gravel suspended in quite a bit of ice. Ice crystals.

....

As we further penetrated it, at times we would break out of the gravel into what appeared to be narrow layers of ice where there was no gravel; and then we would go ahead and go in deeper and then penetrate gravel again, which would be the same or at least appeared to my eyes to be the same density or composition of gravel and ice mixed together.

Tr. 683-84. See also Tr. 705-06. Dr. Reimnitz, the United States' expert geologist, then took samples of the material exposed by the excavations. After melting the samples down in coffee cans, he found each sample to consist of a layer of sand and gravel about 5 to 7 centimeters high, with another 5 to 6 centimeters of water standing on top of it. Tr. 972, 975; see U.S. Ex. 84A-506. The water above the gravel was said to come from excess ice, in the sense that it exceeded the normal porosity of the gravel layer. Tr. 958-59. Thus, the samples were said to be roughly 50% excess ice. *Id.* Assuming that the samples were representative and that summer thawing goes at least one meter deep, Dr. Reimnitz estimated that "ice collapse" would reduce the height of Dinkum Sands by 50 centimeters (1.6 foot) during the summer. Tr. 986-87, 1060-62. Dr. Reimnitz also testified to several processes that could cause excess ice to be introduced into Dinkum Sands each year. Tr. 960-66, 1076-77.

Alaska's expert on excess ice was Dr. Robert Lewellen, a geologist with Lewellen Arctic Research, who disagreed

with Dr. Reimnitz on several points. The questions he raised included whether the samples were representative, Tr. 1830-33, 1938, and how large a drop in elevation could be expected because of thawing, Tr. 1852-53.

2. Ice in international law

Alaska's central disagreement with the United States is on a legal point. In Alaska's view, subsurface ice should be treated like land, and so elevations measured from the highest gravel should not be discounted even if they might become lower in the open-water season. The United States, in contrast, says that land must be wholly terrestrial or organic and that ice has been consistently distinguished from land.

On this question of the treatment of subsurface ice that melts seasonally, the parties cite an assortment of authorities. Alaska notes that geologists and engineers operating in the Arctic consider ice to be a standard type of soil. *E.g.*, John L. Burdick et al., *Cold Regions: Descriptions and Geotechnical Aspects*, in *Geotechnical Engineering for Cold Regions* 1, 29-35 (Orlando B. Andersland & Duwayne M. Anderson eds. 1978). See Tr. 1808; Tr. [16] 17-18. I am not persuaded, however, that the Convention should be interpreted on the basis of whether engineers and earth scientists regard ice as a soil type.

Both parties refer to the celebrated case of *The Anna*, 165 Eng. Rep. 809 (Adm. 1805), which involved the capture by a British privateer of an American vessel near the mouth of the Mississippi River. The capture occurred within three miles of some "little mud islands composed of earth and trees drifted down by the river" and "not of consistency enough to support the purposes of life, uninhabited, and resorted to, only, for shooting and taking birds' nests." *Id.* at 815. The court, holding that American territory should be measured from the islands, said that "[w]hether they are composed of earth or solid rock, will not vary the right of dominion, for

the right of dominion does not depend upon the texture of the soil." *Id.* Whereas Alaska reads *The Anna* as saying that the composition of a feature is irrelevant to its status as an island, the United States emphasizes that its materials were terrestrial, namely earth and trees from the mainland. In any event the case did not involve ice, and so it does not help to settle the issue of whether ice is a variant of land or a separate substance.³⁶

Turning to modern commentators, the United States cites a paper by Dr. Robert Hodgson, formerly the Geographer of the Department of State, for the proposition that "land" in Article 10 must be composed of "dirt, rock, organic matter, or a combination thereof." Robert D. Hodgson, *Islands: Normal and Special Circumstances*, in *Law of the Sea: The Emerging Regime of the Oceans* 137, 148 (John K. Gamble & Giulio Pontecorvo eds. 1974), quoted in USB 13. In a later part of the paper, however, Dr. Hodgson discusses permafrost islands and seemingly assumes that their status as islands depends only on whether they are naturally formed. *Id.* at 197-98. These features are described as follows:

They are comprised of ordinary sand, gravel, clays, and silt. But the individual grains of these materials are rigidly cemented together by interstitial ice to depths of several hundred feet. This icy matrix gives the islands more than enough structural strength to resist any lateral forces that might be exerted by the thermal expansion and contraction of the recurring ice sheet.

Id. at 197, quoting Donald M. Taylor, *Man-made Permafrost*

³⁶ The Court considered *The Anna* at some length in the *Louisiana Boundary Case*, 394 U.S. 11, 64 n.84 (1969). The question there was whether islands could ever serve as headlands of bays under the 1958 Convention. 394 U.S. at 60. The Court noted that *The Anna* had held the mud islands were "deemed the shore," 165 Eng. Rep. at 815, and it concluded that some insular formations could be "so closely tied to the mainland as realistically to be considered part of it," 394 U.S. at 65 n.84.

Islands for Offshore Drill Sites? Ocean Industry, Nov. 1972, at 42. Dinkum Sands, of course, is not a permafrost island of the sort Hodgson describes since the disputed part of its elevation is the part that melts seasonally.

Other writers on the status of ice in international law have dealt mainly with surface ice, either fixed or floating—again in contrast to Dinkum Sands, where the disputed ice occurs below the surface gravel. The literature was reviewed for the United States by Dr. Clive Symmons, a Senior Lecturer in Law at Bristol University and author of *The Maritime Zones of Islands in International Law* (1979).³⁷ Dr. Symmons concluded that impermanence and mobility were two important objections to assimilating ice to land. See Tr. 1118-26; U.S. Ex. 84A-602 at 67-80.

Alaska responds that the writers do not view even all surface ice as subject to these objections. To illustrate with a writer quoted by both parties, Pharand says Antarctic ice shelves are "partly afloat, but their thickness and quasi-permanency render them much more like land than water," and "there appears to be a consensus among interested states that they ought to be considered as land." Donat Pharand, *The Law of the Sea of the Arctic* 181 (1973).³⁸ On the other

³⁷ Alaska sought to exclude Dr. Symmons's testimony as amounting to a brief or argument on international law. Tr. 311-14; ARB 21. The Master denied the motion, in part on the precedent of Judge Jessup's testimony before the Special Master in *United States v. Maine*. Tr. 432-33. See Hans W. Baade, *Proving Foreign and International Law in Domestic Tribunals*, 18 Va. J. Int'l L. 619, 638 & n.111 (1978) (quoting the transcript of hearing before the Special Master); *United States v. Maine*, Report of Special Master Albert B. Maris (1974), at 26, reprinted in *The Reports of the Special Masters of the United States Supreme Court in the Submerged Lands Cases, 1949-1987* (Michael W. Reed, G. Thomas Koester, & John Briscoe eds., 1991), at 593, *exceptions overruled*, 420 U.S. 515 (1975).

³⁸ Other recent writers include C. John Colombos, *The International Law of the Sea* 129-31 (6th rev. ed. 1967); 1 Daniel P. O'Connell, *The*

hand, Pharand also discusses floating "ice islands" in the Arctic, which are "huge fragments detached from ice shelves off Ellesmere Island." *Id.* at 188. In Pharand's opinion, such islands "do not have the qualities of permanency and stability which are basic characteristics of any piece of territory," even if they become grounded. *Id.* at 196.

3. Application to Dinkum Sands

The distinction between surface ice and subsurface ice is perhaps not wholly clearcut. A borderline case was presented by the small piles of gravel that were found lying on top of clear ice in the June 1981 survey. Others were suggested by Dr. Reimnitz, who spoke of ice rubble piles "covered by a drape of gravel," Tr. 1075, and by Dr. Inman, who explained that rivers may thaw relatively early and carry sediment out over still-shorefast ocean ice, Tr. 2278-80. Symmons mentions that even icebergs sometimes "contain[] glacial debris such as rocks and, indeed, possess[] a topography rather like that on *terra firma*." Symmons, *supra* note 38, at 22. Nevertheless, I do not believe that the treatment of surface ice features like icebergs or ice shelves should control the analysis of Dinkum Sands, which has been shown to have its origins in the same processes that formed the admitted barrier islands. See section H *infra*. Furthermore, an analysis assuming that mobility and impermanence go together is unhelpful in the case of Dinkum Sands. The dis-

International Law of the Sea 197-98 (I.A. Shearer ed. 1982); Clive Symmons, *The Maritime Zones of Islands in International Law* 22-24 (1979); Bo J. Theutenberg, *The Evolution of the Law of the Sea: A Study of Resources and Strategy with Special Regard to the Polar Regions* (1984); Susan B. Boyd, *The Legal Status of the Arctic Sea Ice: A Comparative Study and a Proposal*, 22 Can. Y.B. Int'l L. 98 (1984); Jørgen Molde, *The Status of Ice in International Law*, 51 Nordisk Tidsskrift for International Ret 164 (1982).

puted ice is impermanent, but while it persists it is no more mobile than the gravel above it.³⁹

To discount the elevation of Dinkum Sands for ice that melts seasonally would raise practical difficulties. In particular, one would need a reasonably accurate prediction of how far the surface would subside in the summer. Dr. Reimnitz did not claim much precision for his estimate of 50 centimeters, either in general or as a prediction specific to the summer of 1981 at Dinkum Sands. In addition, there was evidence that the nature and amount of submerged ice can vary widely across a formation. See AB 48-49; ARB 23. The witnesses agreed that for an accurate survey of the ice content it would be desirable to have a complete cross-section, as by digging a trench along the feature. Tr. 979 (Reimnitz), 1830-32 (Lewellen). But trenching might destroy the feature by changing its balance with the environment. Tr. 1832. Furthermore, knowing the amount of ice present falls short of knowing how much of it will melt during the summer. *Id.*

To avoid the difficulties that would be caused by trying to discount for temporary subsurface ice, I recommend that Article 10 be read to assimilate all submerged ice to land. At the same time, where seasonal ice may make the difference as to whether a feature reaches a critical elevation, it must be recognized that a pre-thaw measurement cannot be relied upon as representative of the whole year. Thus, although I would not discount the elevations measured in March and June 1981 on account of temporary ice, I view the survey of August 1981 as an essential step in obtaining a fair picture of the height of Dinkum Sands. Similarly for 1982 and 1983, to be discussed next, end-of-summer observations are as important as those from early in the season.

³⁹ As to the mobility of the gravel at Dinkum Sands, see *infra* section I(2).

G. Observations in 1982 and 1983

After the conclusion of the joint monitoring project, there were a number of further observations of Dinkum Sands. Figures 5.5 and 5.6 summarize the results, discussed below. On several occasions, the feature was found to be above mean high water as determined by NOS, even without any of the adjustments considered above in section E(3).

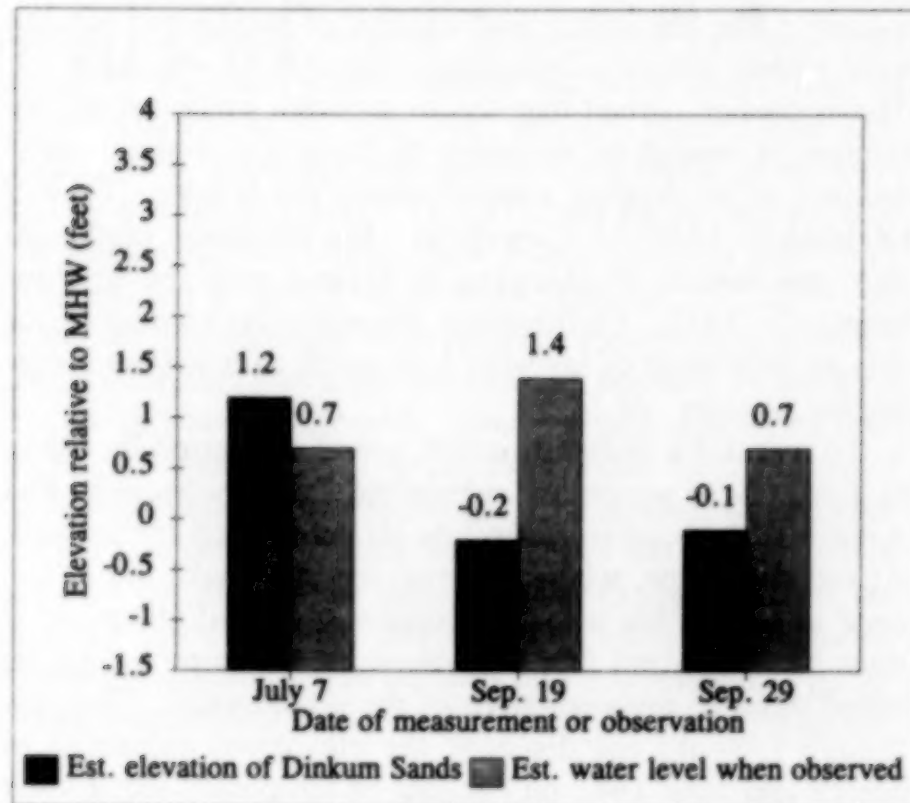


Figure 5.5. 1982 elevations of Dinkum Sands. The dark bars estimate the maximum elevation of Dinkum Sands relative to the NOS estimate of mean high water. The lighter bars compare the actual water level at the time of the measurement or observation. The July 7 observation is described in section G(1); the September estimates are derived in section G(2).

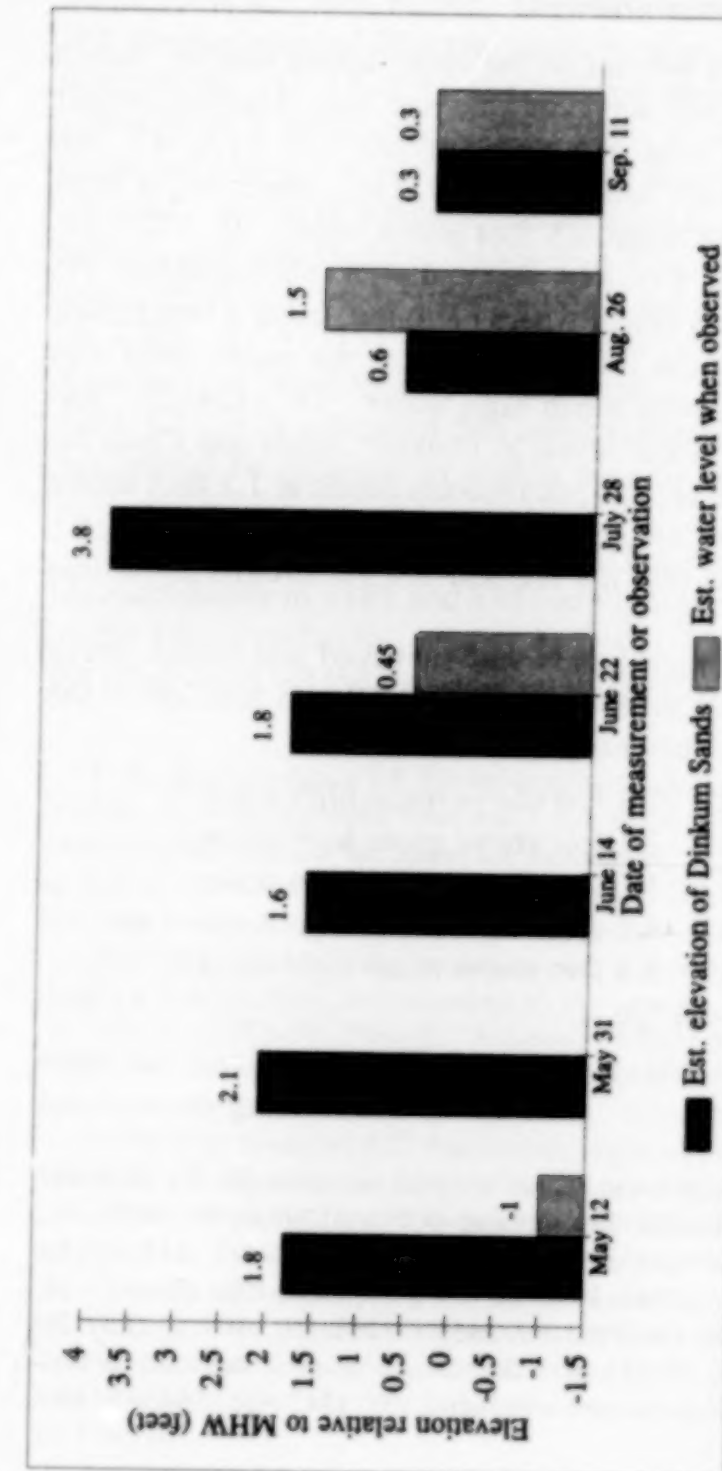


Figure 5.6. 1983 elevations of Dinkum Sands. The dark bars estimate the maximum elevation of Dinkum Sands relative to the NOS estimate of mean high water. The lighter bars, where shown, compare the actual water level at the time. The measurements for May through July are described in section G(1); the observations for August and September, in section G(2).

1. Alaska's measurements

Alaska's main witness on the observations was Mr. James Spargo, a registered surveyor who had been Alaska's project inspector on the joint monitoring project. Tr. 1722-47. He had visited Dinkum Sands on July 7, 1982, observing it from a helicopter to be about 0.5 foot above water. Tr. 1723-24, 1754-55; see Ak. Exs. 84A-402 and -403 (photographs). He then flew to Cross Island where he found, using a benchmark set there during the joint project, that the water level was about 0.7 foot above mean high water. Tr. 1724-25. Assuming that the water levels at Dinkum Sands and Cross Island were the same, this put Dinkum Sands at 1.2 foot above mean high water on July 7, 1982 (fig. 5.5). Mr. Spargo's recollection was that the ice had not yet broken up at this time. Tr. 1723.

In 1983, Dinkum Sands was surveyed and found above mean high water several times. Mr. Spargo testified to the following measurements (fig. 5.6):

May 12, 1983	1.8 feet above mean high water.
May 31, 1983	2.1 feet above mean high water.
June 14, 1983	1.6 feet above mean high water.
June 22, 1983	1.8 feet above mean high water.
July 28, 1983	3.8 feet above mean high water.

Tr. 1727-34, 1741-45.⁴⁰

All the trips except that of June 22 involved the same "water level transfer" procedure, determining the current

⁴⁰ For photographs and related material, see also Ak. Ex. 84A-404 (May 12, 1983); Ak. Exs. 84A-419 and -405 to -407 (May 31, 1983); Ak. Exs. 84A-408 and -409 (June 14, 1983); Ak. Exs. 84A-410, -518, and Tr. 1755-58, 1760-61, 1843, 1846-52, 1890-91, 1925, 1928 (June 21-24, 1983); Ak. Exs. 84A-412 to -418 and Tr. 1758-59, 1766-67 (July 28, 1983). On the trip of July 28, a flightless eider chick was seen on Dinkum Sands, although no nest was found. Tr. 1742-43, 1764; Ak. Exs. 84A-415, -416.

water level at Cross Island in relation to mean high water and the elevation of Dinkum Sands in relation to the current water level. Tr. 1738.⁴¹ The measurement of June 22 resulted from a more extensive survey. Alaska had by then consulted with NOS on how to ensure that its readings were accurate. At NOS's recommendation, Alaska installed tide gauges on both Dinkum Sands and Cross Island and collected simultaneous data for the three days from June 21 to 24, 1983. Tr. 1731, 1756. It also took other recommended steps such as releveling the benchmarks at Cross Island. Tr. 1731-32. NOS estimated that measurements using its methods would be accurate to within plus or minus 0.25 foot. *Id.*⁴²

The United States suggests that Alaska's measurements of Dinkum Sands in 1982 and 1983 are less reliable than those of the joint monitoring project in 1981. Tr. 3462-64. On the other hand, all the measurements described in this section

⁴¹ As shown in figure 5.6, the intermediate results were reported only for May 12, when the water level was 1 foot below mean high water and Dinkum Sands was 2.8 feet above the water level. Tr. 1728. The corresponding information for June 22 comes from Ak. Ex. 84A-410 (showing the water level at 0.45 foot above mean high water).

The water level transfer procedure was illustrated on a videotape made on June 28, 1983, and described by Mr. Spargo. Ak. Ex. 84A-411; Tr. 1734-41, 1762-64, 1766-67. Although the tape shows that Dinkum Sands was above sea level on June 28, no measurement for that day was entered into evidence.

⁴² The error bound of 0.25 foot is comparable to the 0.206 foot error bound NOS assigned to the 1980-81 tidal datum. The difference is apparently due to the fact that NOS obtained approximately four months of simultaneous readings in 1980-81, as against only three days in 1983. Tr. 1731-32. After analyzing the simultaneous observations in 1983, NOS reported that the correlation was excellent and that the water level transfer procedure between Dinkum Sands and Cross Island could therefore be used without any time or height corrections. Ak. Ex. 84A-420; Tr. 1745-47.

are well above the error band. The measurement of June 22, 1983, seems worthy of special weight since it used all of the procedures recommended by NOS and was carried out, moreover, with the help of NOS personnel. See Tr. 797-800; U.S. Ex. 84A-301. The 2-foot increase in height from June 22 to July 28 is puzzling, but Mr. Spargo described the point measured on July 28 as a mound of gravel that might have been under an ice rubble pile all along. Tr. 1745, 1759.

2. Late season observations

In 1982, as described above, the only visit to Dinkum Sands by Alaska's representatives was made on July 7, before the ice broke up. The United States' witness, Dr. Reimnitz, reported on four visits later in the season. On September 19, 1982, visiting by boat, Dr. Reimnitz found Dinkum Sands about 50 to 100 centimeters under water (1.6 to 3.3 feet). On September 29 it was 25 to 50 centimeters under water (0.8 to 1.6 feet). On October 1 and October 9 he made aerial observations and again found it under water; he did not estimate the amount. See U.S. Ex. 84A-301 (summary of observations); U.S. Ex. 84A-507(f) (photograph from October 1); Tr. 920-23, 944-45, 948-50.

Dr. Reimnitz did not attempt to say where Dinkum Sands stood in relation to mean high water in September and October 1982. Unlike his visits in 1979 and 1980, *supra* pages 247-48, his estimates of the depth to which Dinkum Sands was submerged were based on visual observations rather than actual surveys of the feature. In addition, Dr. Reimnitz said that September 19, 1982, was "a rather nasty day" and that waves were again running on September 29. Tr. 944. Nevertheless, Dr. Reimnitz's observations are the only ones available for the open-water season of 1982. As stressed in section F(3), late-season data is necessary to an adequate picture of the behavior of Dinkum Sands over the year.

Some inferences about the relationship of Dinkum Sands to mean high water in late 1982, using Dr. Reimnitz's minimum estimates of the depth, can perhaps be drawn from the evidence as to seasonal water levels and the 0.5 foot range of tide. In general sea level rises from about May until August, when it reaches a peak and then declines as the fall progresses. See figure 5.1; Ak. Ex. 84A-802.⁴³ As to the difference in sea level between July and September, the data are mixed (fig. 5.1). One source shows the September level about 0.4 foot lower than July; the other shows September about 0.2 foot higher than July. From July to October, there is a net drop in average sea level of about 0.3 to 0.6 foot.⁴⁴

In relation to sea level at the times of the observations, Dinkum Sands changed from 0.5 foot above water on July 7 to at least 1.6 foot below water on September 19—a difference of at least 2.1 feet. The question is how much of the difference resulted from a change in the water level and how much from a change in the elevation of Dinkum Sands. Allowing for a 0.2 foot rise in sea level from July to September and for another 0.5 foot as the maximum rise due to different states of the tide, Dinkum Sands still appears to have dropped at least 1.4 foot in elevation by September 19—taking it from 1.2 foot above mean high water to 0.2 foot below that datum. See figure 5.5. This estimate does not take into account that the poor weather on September 19 may have caused a change in the water level not already reflected in

⁴³ There is one qualification to this statement. According to the measurements at Cross Island in 1980-81 (fig. 5.1), the average sea level declined sharply (about 0.7 foot) from August to September, then rose slightly (about 0.1 foot) from September to October, before declining again (about 0.5 foot) from October to November.

⁴⁴ In 1980-81, mean sea level at Cross Island was about 0.3 foot lower in October than in July. See figure 5.1. Dr. Barnett's model, using weather data from 1950-81, predicts a typical difference of about 0.6 foot between July and October at Cross Island. *Id.*

the seasonal change. In every other respect, however, the estimate is based on the numbers most favorable to Alaska.

Again, on September 29, Dinkum Sands was observed as at least 0.8 foot under water. Compared to the July observation, when it was 0.5 foot above water, the difference is 1.3 foot. Sea level at the end of September, on the average, should lie between the averages for the full month of September and the full month of October, or about 0.2 to 0.35 foot below the average for July (fig. 5.1). If sea level on September 29 was no higher than it had been at the time of the July measurement, then the 1.3 foot difference relative to observed sea level must have been due entirely to a drop in the elevation of Dinkum Sands. The drop of 1.3 foot would put Dinkum Sands at about 0.1 foot below mean high water on September 29 (fig. 5.5).

The September observations are subject to uncertainties including the state of the tide, the effects that weather may have had on the water level, and the exact amount by which Dinkum Sands was submerged. On the other hand, the September results are in line with Dr. Reimnitz's estimate, *supra* page 270, that the feature may lose about 50 centimeters (1.6 foot) in elevation during the summer because of ice collapse. I am therefore doubtful that Dinkum Sands remained above mean high water throughout the open water season of 1982.

In 1983, after the visits of May through July, several more visits to Dinkum Sands were made by Dr. Lewellen. These later visits, made at Alaska's request, involved only helicopter observations: reading the tide staff at Cross Island, noting the appearance of Dinkum Sands, and taking photographs. Tr. 1745, 1838, 1913. Thus, on August 26, 1983, Dinkum Sands was found to be under water by less than 1 foot but above mean high water by about 0.6 foot; and on September 11, 1983, it was at sea level, which was about 0.3 foot above mean high water. See figure 5.6; Ak. Exs. 84A-514 and -515 (trip reports and photographs); U.S. Ex. 84A-

703 (translating the observations into terms of mean high water); Tr. 1837-41, 1880-82, 1913-14, 1930-31. On a third visit, made on October 12, 1983, Dinkum Sands was under water by 6 to 8 inches, but the tide staff had been destroyed by ice movement, leaving the relationship to mean high water unknown. Ak. Ex. 84A-516; Tr. 1841-43, 1928.

Finally, Dr. Lewellen had flown over Dinkum Sands on December 22, 1983, observing a very large ice rubble pile that was still there the following May. Tr. 1856; Ak. Ex. 84A-517. The pile was estimated in May 1984 to be 40 to 50 feet high. Tr. 1858. Dr. Lewellen expressed the opinion that the ice movement creating the rubble pile had also elevated the surface of Dinkum Sands. *Id.* Only snow and ice were visible, however, and no measurements had been taken.

The significance of the varying measurements of Dinkum Sands depends on interpretation of the standard for an island, to be taken up in section I. I return to the measurements in section I(3)(d).

H. Coastal processes

Alaska argues that the characteristics of Dinkum Sands are "normal and natural characteristics that one would expect and associate with barrier islands generally." AB 53-54. This conclusion was supported by the testimony of Dr. Douglas Inman of the Scripps Institution of Oceanography. Dr. Inman explained how barrier islands are created and maintained, both in general (as along parts of the east coast of the United States) and in the Arctic. The processes involve the deposition of sediment, its transport along the shore, and various kinds of other interaction with waves and currents. In addition, both Dr. Inman and Dr. Lewellen testified for Alaska on several kinds of ice-related processes that work on barrier islands.

The testimony made it clear that Dinkum Sands is part of a naturally formed barrier chain from Flaxman Island in the

east to Reindeer Island on the west, a distance of some sixty miles (fig. 3.2, *supra* at page 24). Alaska's witnesses also thought that Dinkum Sands is in long-term equilibrium. Tr. [16] 37 (Inman); Tr. 1896-97 (Lewellen). The United States' witness, Dr. Reimnitz, agreed in the sense that he suggested it might be a thousand years before Dinkum Sands disappears. Tr. 997; *see* Tr. [16] 25.

That Dinkum Sands is in long-term equilibrium does not in itself show that the formation lies above mean high water and so meets the standard for an island. But Alaska goes on to argue precisely the point that "Dinkum Sands' continued existence . . . is testimony to its island status." Tr. 3441; *see* Tr. 3392-93, 3423-24, 3437-43; ARB 68-71.

The argument begins with Dr. Inman's description of how beaches and barrier features are formed, including the onshore effect of wave action. He said that low waves tend to transport sediment onshore, building a berm, whereas large waves tend to erode and flatten the beach. Tr. 2303-06; *see* Ak. Ex. 84A-611. Alaska emphasizes Dr. Inman's point that "this beach response is the normal on/offshore response that builds beaches and it is based on a mean water level. The building goes out [sic] above mean water level and the cutting below mean water level." Tr. 2306. In this way, Dr. Inman said, "the waves maintain the barrier The wave energy rides on a mean sea level, and it is above this mean sea level that the waves tend to build a berm—and it's below this that the material is supplied to build that berm." Tr. 2310; *see also* Tr. [16] 15-16.

Alaska infers from this testimony that, because of the interaction between waves and beaches, only features lying above mean sea level can be maintained, while features below mean sea level will have their sediments dissipated. Therefore, if a feature persists at all, as Dinkum Sands has, it must be above mean sea level. Alaska further points out that the mean sea level in summer, the only time when wave

action occurs in the Beaufort Sea, is higher than mean high water (an average taken over all seasons). Tr. 3438-39. Thus, Alaska concludes that the continuing presence of Dinkum Sands proves that it is above mean high water, at least in summer. Alaska also says that Dinkum Sands is higher in winter than in summer because of the timing of ice processes that build it up. Tr. 3439.

If this reasoning is correct, it circumvents the need to analyze survey data in order to determine whether Dinkum Sands is an island. The United States responds that the reasoning must be wrong because the formation "is for long periods of many summers below mean sea level and yet it remains as a shoal." Tr. 3465.

The United States' position seems correct. Dr. Inman's testimony certainly refers to cutting processes below mean water level and building processes above mean water level. Yet the role of mean water level is not as precise as Alaska's argument requires. Dr. Inman illustrated his testimony with measurements of a California beach in October and April, the first showing the profile after the small waves of summer and the second, the changes after the large waves of winter. During the winter, erosion occurred at elevations from about 10 feet above mean sea level to 10 feet below mean sea level, and accretion took place below that. Tr. 2304-06, Ak. Ex. 84A-611. Presumably changes in the other direction occur in the shift back to a summer wave pattern.

Alaska suggests that the Beaufort Sea, because of pack ice that is always offshore, in effect has only small summer waves. Dr. Inman's testimony does not lend much support to this suggestion. He did say that waves depend on the distance over which winds can blow to generate them. Tr. 2265, 2268. He also stated, however, that the stretches of open water along the Beaufort Sea coast in summer, although narrow, are reasonably long and that the area "has some rather strong winds operating . . . that generate large

waves upon occasion." Tr. 2283. On cross-examination, Dr. Inman added that large waves during the summer will tend to reduce Dinkum Sands in size, while small waves will tend to build it; he did not claim there was a general trend during the open-water season. Tr. [16] 45. For the United States, Dr. Reimnitz observed that Dinkum Sands does not follow the textbook pattern; on the contrary, it tends to lose elevation during the summer under wave action. Tr. 987-89, 1038.

The testimony was also less than conclusive as to just when ice processes work to build the feature up again. The only actual measurement of elevation during the winter was the March 1981 survey for the joint monitoring project, which found the highest gravel to be slightly below mean high water. *See supra* section E(2). Dr. Lewellen, from personal observations, said that autumn is the primary buildup period for the formation:

[T]he feature is nourished or maintained by ice rubbing that occurs in the fall, then we have freeze-up or essentially locking in of this area for the entire winter months, we do not get movement or any sort of action until the following spring.

Tr. 1859; *see also* Tr. 1822-25; AB 22-24. Dr. Reimnitz also said that important building processes take place at freezeup in the fall. Tr. 960-66, 1076-77. On the other hand, Lewellen acknowledged that ice rubbing or ice push could also occur when the ice breaks up in the spring. Tr. 1824, 1910. Reimnitz described a process he called bulldozing that is thought to occur mainly during the winter. Tr. 1010-12. Inman described two springtime processes that may add sediment. Tr. 2278-82; Tr. [16] 13-15, 40-41; *see* AB 24-26, 27-28.

Finally, although Dr. Inman thought that Dinkum Sands was in long-term equilibrium, he did not agree that it is in

equilibrium for the short term, meaning "a matter of a summer season, a year, two years, even ten years." Tr. [16] 37. Asked whether the processes he had described had anything to do with explaining observations of Dinkum Sands as sometimes above water and sometimes below water, he replied:

I see a fairly clear relation to the natural processes that result from the fact that sediment sources and sediment transport mechanisms are not totally uniform from year to year.

So . . . we have times of maximum sediment supply followed by times of very little supply.

. . . [These processes] result in times when one section was badly eroded or more badly than its norm, followed in [turn] by that same section by a time when it would be . . . a much larger structure than [formerly].

Tr. 2330-31. Summarizing his testimony, Dr. Inman again said that "sometimes the islands ride high and sometimes they ride low, but because one is low for a period of several years is not an indication that it is necessarily disappearing." Tr. [16] 24.

This testimony seems entirely consistent with measurements and observations of Dinkum Sands as sometimes high and sometimes low. Certainly it does not compel the inference sought by Alaska, that the persistence of Dinkum Sands near mean high water implies that it must be above mean high water for most or all of the time.

I. Requirements for an island

According to section E, it is likely that Dinkum Sands was below mean high water continuously from March 1981 to August 1981, that is, throughout the period of topographic surveys for the joint monitoring project. According to the evidence reviewed in section G, Dinkum Sands was above

mean high water in July 1982 but may well have been below it by September 1982. In 1983 Dinkum Sands appears to have been above mean high water from May to September; it may or may not have slumped below by October; and its gravels may have been elevated again by December as the result of ice movement. Finally, as described in section H, very little is known about the usual elevation of Dinkum Sands during the winter.

It becomes critical to consider how this evidence is to be evaluated under Article 10(1) of the Convention.

1. *The notion of permanence*

The United States argues that Dinkum Sands lacks sufficient permanence to qualify as an island. It finds a requirement of permanence both in pre-Convention authorities and in Article 10(1) of the 1958 Convention. In Article 10(1), the United States takes permanence to be implicit in the repeated use of the word "is": An island "*is* a naturally formed area of land, surrounded by water, which *is* above water at high tide" (emphasis added). Alaska disputes both the existence of a permanence requirement and its application to Dinkum Sands.

As discussed by the parties, the concept of permanence includes several overlapping strands. One is the long-term existence of an identifiable feature; another is whether the feature's horizontal location may vary; a third is whether the feature must be always above the tidal datum.

The first point, the long-term existence of some feature, is not disputed. Taking the name "Dinkum Sands" to refer to the entire formation, most of which is always submerged, the United States agrees that a permanent feature exists. Tr. 3355-56.

2. *Horizontal permanence*

The United States emphasizes that there have been dramatic movements of the exposed area of Dinkum Sands. A survey monument was set, at or near the high point, in mid-August 1979. Tr. 1262-64, 1291; Ak. Exs. 84A-116 to -118; U.S. Ex. 84A-504 at 4. The area of the formation visible at the time ranged from at most 5 feet by 20 feet on August 12, to 15 by 30 feet on August 14. Ak. Ex. 84A-118.

In the spring of 1980 the crest of Dinkum Sands was found to be 1200 to 1300 feet away from its August 1979 location. Tr. 990-92, 1077; U.S. Ex. 84A-302, map 3. During the 1981 joint monitoring project the high points remained within about 60 feet of the 1980 position. See U.S. Ex. 84A-302. Away from the high points, which were confined to an area about 75 feet square, the measured elevations were too low to form part of an island.⁴⁵

In the State's survey of May 31, 1983, it was reported that the high points had moved again. The exposed area was now about 100 feet north and 500 feet east of the original monument set in 1979. Ak. Ex. 84A-419; Tr. 1759-61. At the survey of June 22 this area measured 60 feet along its longest dimension, Ak. Ex. 84A-410, and the maximum reported was about 25 by 75 feet on July 28, 1983, Tr. 1743.⁴⁶

⁴⁵ Relative to the 50-foot benchmark of figures 5.2 through 5.4, the elevations outside of the area containing the high points were all less than 50.2 feet. U.S. Ex. 84A-302, map 5.

If there is an island at Dinkum Sands, the three-mile belt is measured from its low-water line. See *supra* section A. Since the range of tide at Dinkum Sands is about 6 inches, the relevant low-water datum should be about 6 inches below mean high water. On the scale of the 50-foot benchmark and the estimates of mean high water shown in figures 5.2 through 5.4, one would expect the low-water datum to be at least 51 feet.

⁴⁶ Besides the movement described in the text, there was also testimony that Dinkum Sands, along with neighboring islands, is migrating

In arguing that mobility of the high points disqualifies Dinkum Sands from island status, the United States quotes its witness, Dr. Symmons:

[I]f an island position is of a fickle nature, that is to say, the position of the island moves about in a haphazard or frequent fashion from the seabed, then that does not have such permanence for the purposes of generating a maritime zone as an insular formation.

Tr. 1099; USB 28. Specifically, the United States contends that there is no such concept as an "ambulatory island" in international law. *Id.*; Tr. 1115; U.S. Ex. 84A-602 at 66-67. Although its supporting arguments are made in terms of permanence more generally, the points most relevant here are derived from the captor's counsel's argument in *The Anna*, 165 Eng. Rep. 809 (Adm. 1805), and from a policy rationale.

The policy rationale is that mariners need to be sure of the location of the territorial sea, which is arguably impossible if mobile islands are taken into account in its definition. The United States supports this contention with citations to publicists. For instance, Fulton wrote in criticism of an 1882 treaty that gave exclusive fishery rights within three miles of "dependent islands and banks" as well as from the mainland:⁴⁷

Sandbanks . . . may not be permanent, and usually vary in extent, configuration and position with lapse of time and even after a single tempest; and the extent of sea appen-

landward by about 11 meters a year. Tr. 992-93, 1000, 1022-24; U.S. Ex. 84A-510. *See also* Tr. 2262-63. It is not suggested, however, that this movement changes the legal status of the islands.

⁴⁷ The treaty in question was the North Sea Fisheries Convention, May 6, 1882, art. II, 160 Consol. T.S. 219 (in French), *translated in* Thomas W. Fulton, *The Sovereignty of the Sea* 634-35 (1911).

dent will vary likewise. It would thus be difficult to fix a precise and permanent limit in connection with them.

Thomas W. Fulton, *The Sovereignty of the Sea* 640 (1911). *See also* U.S. Ex. 84A-602 at 59-62; Tr. 1104-05, 1113. Apart from the mariner's point of view, a moving formation also causes difficulties if used as the basis for allocating resources in the surrounding submerged lands.⁴⁸

The policy arguments would be more persuasive were it not for the precedents lined against them. In *The Anna*, the captor's counsel's argument was clearly rejected by the court. The case involved a ship captured within three miles of some uninhabited mud islands near the mouth of the Mississippi River. *See supra* page 271. Although captor's counsel described the islands as "temporary deposits of logs and drift," 165 Eng. Rep. at 811, and argued that they did not carry a territorial sea, the Court of Admiralty responded without addressing whether the islands were permanent:

[T]here are a number of little mud islands composed of earth and trees drifted down by the river, which form a kind of portico to the mainland. It is contended that these are not to be considered as any part of the territory of

⁴⁸ This practical problem is highlighted in a letter of October 22, 1965, from Archibald Cox, then Special Assistant to the Attorney General, to Attorney General Nicholas deB. Katzenbach, in preparation for what became the *Louisiana Boundary Case*, 394 U.S. 11 (1969). Cox wrote:

Having the boundary an ambulatory line raises extraordinary practical difficulties in dealing with oil and gas leases. The lessee needs to know with whom he should deal and exactly what he is getting. . . . Part of his investment in drilling and locating wells should not be destroyed because periodic accretion or erosion followed by some new survey shows the line to have shifted at some unknown date after he made the investment.

Ak. Ex. 85-189 at 4.

America, that they are a sort of "no man's land," not of consistency enough to support the purposes of life, uninhabited, and resorted to, only, for shooting and taking birds' nests. . . . I am of a different opinion; I think that the protection of territory is to be reckoned from these islands; and that they are the natural appendages of the coast on which they border, and from which indeed they are formed. . . . Consider what the consequence would be if lands of this description were not considered as appendant to the mainland, and as comprised within the bounds of territory. If they do not belong to the United States of America, any other power might occupy them; they might be embanked and fortified. . . . The possibility of such a consequence is enough to expose the fallacy of any arguments that are addressed to shew, that these islands are not to be considered as part of the territory of America. . . .

I am of opinion that the right of territory is to be reckoned from those islands. . . .

165 Eng. Rep. at 815.

The mud formations at the mouth of the Mississippi were considered again in 1963, when Solicitor General Archibald Cox described them as islands despite their highly changeable and perhaps mobile nature. Title to Naturally-Made Lands Under the Submerged Lands Act, 42 Op. Att'y Gen. 241, 241-42, 250 n.9 (1963). In 1974, Special Master Armstrong recommended that Louisiana's coastline be measured from such mudlumps, and the Court accepted his recommendation. *United States v. Louisiana*, Report of Special Master Walter P. Armstrong, Jr. (1974) at 43-44, reprinted in Reed, Koester, & Briscoe, *supra* note 37, at 181, and in 59 I.L.R. 249, *exceptions overruled*, 420 U.S. 529 (1975).⁴⁹

⁴⁹ The United States argues that the appearances of Dinkum Sands are far more fleeting than those of formations in the Mississippi delta. Tr.

More generally, it is clear from the Convention that mariners must live with an ambulatory coastline. See *United States v. California*, 381 U.S. 139, 176 (1965); *United States v. Louisiana (Texas Boundary Case)*, 394 U.S. 1, 5 (1969); *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 32 (1969).⁵⁰ And the Court has chosen to accept the resource allocation problems of an ambulatory coastline as an implication of using the Convention to interpret the Submerged Lands Act. *Id.* at 32-35. I therefore conclude that a requirement of strict locational permanence should not be read into the Convention's definition of an island.

The United States argues, however, that the intermittent exposure of high points on Dinkum Sands in different places, interspersed with periods when the feature is completely submerged, amounts not to an ambulatory coastline but to an "entirely new coastline." Tr. 3358. The correct analysis, it suggests, is "that when a feature pops up today in one location, disappears, and another feature pops up tomorrow in another location, we do not have one island (assuming all other criteria are met) but two." USB 28. This is an argument that the horizontal movement at Dinkum Sands should not be considered in isolation from its vertical movement. Accordingly, I turn in the next section to the question of vertical permanence. As will be seen, vertical perma-

3361-62, 3451-52. It is true that, according to Special Master Armstrong's report, one mudlump used as part of the coastline lasted for at least ten years. The record contains no evidence, however, of the behavior of these features in general. Compare the remark by the United States' delegate at the 1930 League of Nations Conference for the Codification of International Law that, among many other geographical situations, "we have discussed the moving islands at the mouth of the Mississippi." *Acts of Conference*, *infra* note 51, at 147.

⁵⁰ Cox's 1965 letter, quoted *supra* note 48, also acknowledged that the coastline was ambulatory under international law, the Submerged Lands Act, and the 1965 *California* decision.

nence suffices to resolve the status of Dinkum Sands, making it unnecessary to consider the effects of vertical and horizontal movement together.

3. Vertical permanence

a. History and interpretation of the Convention

The arguments over a requirement of vertical permanence turn primarily on the history of Article 10(1) of the Convention. As already stated, Article 10(1) provides: "An island is a naturally formed area of land, surrounded by water, which is above water at high tide." The drafting history of this definition goes back at least to the League of Nations Conference for the Codification of International Law, held at The Hague in 1930.⁵¹

In preparation for the conference, a questionnaire was circulated in 1929 that asked, among other things, "[W]hat is meant by an island?" *Bases of Discussion*, *supra* note 51, at 105. Replies were received from sixteen countries. *Id.* at 52-54.⁵² The committee preparing for the conference, after

⁵¹ The relevant conference documents are as follows:

Conference for the Codification of International Law, 2 Bases of Discussion: Territorial Waters, League of Nations Doc. C.74.M.39.1929.V (1929), reprinted in *2 League of Nations Conference for the Codification of International Law [1930]* (ed. Shabtai Rosenne 1975) (hereafter *Bases of Discussion*).

3 Acts of the Conference for the Codification of International Law, Minutes of the Second Committee: Territorial Waters, League of Nations Doc. C.351(b).M.145(b).1930.V (1930), reprinted in *4 League of Nations Conference for the Codification of International Law [1930]* (ed. Shabtai Rosenne 1975) (hereafter *Acts of Conference*).

⁵² The United States' reply concluded: "It would seem that any naturally formed part of the earth's surface, projecting above the level of the sea at low tide and surrounded by water at low tide, should be considered an island." *Bases of Discussion*, *supra* note 51, at 52-53.

summarizing these, offered observations and a proposed basis of discussion:

OBSERVATIONS.

Two main conceptions appear in the above replies. According to one, an island must be above water at high tide. According to the other, it is sufficient for it to be above water at low tide.

A compromise may be contemplated. It will consist in allowing an island (*i.e.*, an isolated island) to have its own territorial waters only if it is above water at high tide, but in taking islands which are above low-water mark into account when determining the base line for the territorial waters of another island or the mainland, if such islands be within those waters.

BASIS OF DISCUSSION No. 14.

In order that an island may have its own territorial waters, it is necessary that it should be permanently above the level of high tide.

In order that an island lying within the territorial waters of another island or of the mainland may be taken into account in determining the belt of such territorial waters, it is sufficient for the island to be above water at low tide.

Id. at 54.⁵³

⁵³ The United States later proposed the following amendment to this basis of discussion:

1. Each island (subject to the definitions of an island which are contained in the following paragraphs) is enveloped by its own belt of territorial waters

2. Each separate body of land which is capable of use shall be regarded as an island in determining the extent of territorial waters.

3. Each separate body of land any part of which lies within three nautical miles of the continental mainland or of another which is capable of use shall be regarded as an island, in determining the extent

At the conference, the subcommittee considering the matter revised the treatment to read as follows:

ISLANDS.

Every island has its own territorial sea. An island is an area of land, surrounded by water, which is permanently above high-water mark.

Observations.

....

An elevation of the sea-bed, which is only exposed at low tide, is not deemed to be an island for the purpose of this Convention (see, however, the above proposal concerning the base-line).

Acts of Conference, supra note 51, at 219.⁵⁴ No action was taken on the subcommittee's report, and ultimately the entire

of territorial waters, if it stands above the level of low tide, whether or not it be capable of use.

Acts of Conference, supra note 51, at 195, 200.

⁵⁴ The proposal concerning the baseline stated, in relevant part:

BASE-LINE.

....

Elevations of the sea-bed situated within the territorial sea, though only above water at low tide, are taken into consideration for the determination of the base-line of the territorial sea.

Observations.

....

If an elevation of the sea-bed which is only uncovered at low tide is situated within the territorial sea off the mainland, or off an island, it is to be taken into consideration on the analogy of the North Sea Fisheries Convention of 1882 in determining the base-line of the territorial sea.

It must be understood that the provisions of the present Convention do not prejudice the questions which arise in regard to coasts which are ordinarily or perpetually ice-bound.

Acts of Conference, supra note 51, at 217. As to the North Sea Fisheries Convention of 1882, see *supra* note 47 and accompanying text.

conference failed for want of agreement on the width of the territorial sea. See 1 Daniel P. O'Connell, *The International Law of the Sea* 21 (I.A. Shearer ed. 1982); 1 Aaron L. Shalowitz, *Shore and Sea Boundaries* 210 n.3 (U.S. Dep't of Commerce Pub. 10-1, 1962).

The work of the Hague Conference was later continued, under United Nations auspices, by the International Law Commission. The Commission took up the régime of the territorial sea in 1951 and produced a final report, including draft articles proposed for an international convention, in 1956. Mr. J.P.A. François served as special rapporteur.

François initially proposed to define "island" in the same language as the 1930 proposal: "an area of land surrounded by water, which is permanently above high-water mark."⁵⁵ At the 1954 session of the Commission, however, Sir Hersch Lauterpacht of the United Kingdom proposed adding the words "in normal circumstances" so as to allow for "exceptional cases." *Summary Records of the 260th Meeting*, [1954] 1 Y.B. Int'l L. Comm'n 90, 92.⁵⁶ The amendment was adopted. *Id.* at 94; *Report of the International Law Commission to the General Assembly*, 9 U.N. GAOR Supp. (No. 9) at 15, U.N. Doc. A/2693, reprinted in [1954] 2 Y.B. Int'l L. Comm'n 140, 156. The same language was retained

⁵⁵ J.P.A. François, *Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/53 (1952) (in French), [1952] 2 Y.B. Int'l L. Comm'n 25, 36 (translation from Ak. Ex. 84A-21 at 41); J.P.A. François, *Second Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/61 (1953) (in French), [1953] 2 Y.B. Int'l L. Comm'n 57, 68; J.P.A. François, *Third Report on the Régime of the Territorial Sea*, U.N. Doc. A/CN.4/77 (1954) (in French), [1954] 2 Y.B. Int'l L. Comm'n 1, 5. For full citations to the Yearbooks of the International Law Commission, see *supra* section IV, note 10.

⁵⁶ As examples of exceptional cases, Dr. Symmons mentioned hurricanes, tidal waves, and situations "where atmospheric and/or weather and high tidal factors converge." U.S. Ex. 84A-602 at 44. See also Tr. 1116.

at later sessions of the Commission. The article on islands, as it appeared in the Commission's final report, thus read:

Every island has its own territorial sea. An island is an area of land, surrounded by water, which in normal circumstances is permanently above high-water mark.

Report of the International Law Commission to the General Assembly, 11 U.N. GAOR Supp. (No. 9) at 16, U.N. Doc. A/3159 (1956), reprinted in [1956] 2 Y.B. Int'l L. Comm'n 253, 270. The accompanying commentary elaborated:

(2) An island is understood to be any area of land surrounded by water which, except in abnormal circumstances, is permanently above high-water mark. Consequently, the following are not considered islands and have no territorial sea:

(i) Elevations which are above water at low tide only. Even if an installation is built on such an elevation and is itself permanently above water—a lighthouse, for example—the elevation is not an "island" as understood in this article.

Id. With respect to the features now called low-tide elevations, the Commission also adopted a separate article:

Drying rocks and drying shoals which are wholly or partly within the territorial sea, as measured from the mainland or an island, may be taken as points of departure for measuring the extension of the territorial sea.

Id. at 17.

The United States' position on the work of the International Law Commission was developed in a series of internal State Department memoranda written in 1957. In the memorandum on islands, drying rocks, and drying shoals, Mr. Benjamin H. Read wrote:

The Commission's definition [of an island] is the same as that adopted by the Second Sub-Committee at the 1930

Hague Conference, except that the words "in normal circumstances" were added . . . in order to "cover exceptional cases." The added words seem incompatible with the succeeding word "permanently" in the definition. Both terms might well be omitted, since current international law does not purport to solve such minor problems . . . as how to treat land which is above sea level at neap high tide but not spring high tide or only at high tides during certain seasons of the year.

Ak. Ex. 84A-021 at 11.⁵⁷ In connection with the article on drying rocks and drying shoals, Mr. Read made a related comment:

[T]here is no direct reference to the tides in article eleven [drying rocks and drying shoals] or its commentary Do elevations that appear above sea level at spring low tide but not at neap low tide qualify? How should elevations in the Arctic regions be treated which appear above sea level at low tide only during the months of the year when the sun appears above the horizon to add to the moon's gravitational pull. The ILC has wisely refused to resolve these questions for which there is little or no legal authority.

Id. at 23-24.

At the 1958 United Nations Conference on the Law of the Sea, the United States proposed a new amendment that would drop both the words "permanently" and "in normal circumstances." U.N. Doc. A/CONF.13/C.1/L.112 (1958), U.N. Conference on the Law of the Sea, 3 Official Records 242.⁵⁸ It argued:

⁵⁷ Neap high tides are the twice-monthly lowest high tides; spring high tides are the twice-monthly highest high tides. See I Shalowitz, *supra* page 297, at 86-87.

⁵⁸ The United States' amendment also proposed adding the words "naturally-formed" to the definition, in order to prevent states from using

The requirements in the International Law Commission's definition of an island that it shall be above the high-water mark "in normal circumstances" and "permanently" are conflicting, and since there is no established state practice regarding the effect of subnormal or abnormal or seasonal tidal action on the status of islands, these terms should be omitted.

Id. The Conference accepted the United States' position. U.N. Conference on the Law of the Sea, 1st Comm., 52d mtg., 3 Official Records 160, 161-63 (1958); *id.*, 19th plen. mtg., 2 Official Records 61, 64. The final Convention text thus defined an island in the terms of Article 10: "a naturally formed area of land, surrounded by water, which is above water at high tide."

The United States argues that "permanently" is still implicit in Article 10, along with an implicit exception for abnormal circumstances. If that is correct, then Dinkum Sands would appear to be disqualified from island status by the August 1981 survey alone. Even Alaska agrees that at that survey Dinkum Sands was below the datum.⁵⁹ I am not persuaded, however, that the pre-Convention materials lead to such a clear-cut result. Neither do I agree with the United States that the Convention left any previous customary law of islands entirely intact, for the Convention did adopt a distinction between islands and low-tide elevations that had earlier represented only a compromise among inconsistent positions.

artificial land to extend the territorial sea to the detriment of freedom of the high seas.

⁵⁹ Although Alaska argued the weather was abnormal in 1981, the distance of Dinkum Sands below mean high water found in August 1981 was much greater than the claimed abnormality could account for. Furthermore, seasonal changes in the water level and seasonal changes in elevation both appear to be normal processes at Dinkum Sands.

The 1958 deletion of "permanently" must be read together with the deletion of "in normal circumstances." The two phrases were viewed as conflicting, but in fact any conflict seems to be limited to the case where abnormal circumstances lead to the temporary inundation of a feature that would otherwise qualify as an island. I do not believe the drafters intended, in eliminating supposedly conflicting standards, to adopt yet another standard less demanding than either of the first two. That the drafters declined to say an island must be "permanently above water at high tide" or "normally above water at high tide" does not mean they intended to insert some weaker qualifier such as "sometimes" or "occasionally." Even Alaska contends only that Article 10 permits a feature "to slump on occasion" below the tidal datum and still to qualify as an island. AB 64.

There is an arguably relevant international case that supports a rather demanding standard. This was an arbitration decision that considered the status of Eddystone Rock, off the coast of Cornwall in the English Channel. *Delimitation of the Continental Shelf (U.K. v. Fr.)*, 18 R. Int'l Arb. Awards 3, 65-74 (1977). Great Britain said the rock was an island because it was uncovered at mean high water spring tides and covered only at "high water equinoctial springs." *Id.* at 66. The French argued that the formation was only a low-tide elevation since it did not "remain uncovered continuously throughout the year." *Id.* at 67.⁶⁰ The court of arbi-

⁶⁰ At a later stage of the proceedings, the United Kingdom said that "Although . . . other interpretations of the expression 'high tide' are possible, . . . 'mean high-water spring tides' is the only precise one. Today . . . the height of the natural rock at the base of the stump of the old . . . lighthouse is about 2 feet above mean high-water spring tides and 0.2 feet above the highest astronomical tide." 18 R. Int'l Arb. Awards at 68. The French replied, in part, "that the British concept of 'high-water' is very questionable and a large number of States, including France, take it as meaning the limit of the highest tides; and that the information given by

tration did not decide between these positions because it found that France had already accepted the relevance of Edystone Rock as a basepoint. Moreover, the question was the choice of tidal datum (as to which the United States uses mean high water), not the treatment of a formation that itself rises and falls. Nevertheless, the parties did argue the case as if a formation, to be an island, must be almost never below water.

I conclude that Article 10 contains an implicit modifier that is at least as strong as "generally," "normally," or "usually."

b. Features of variable height

For a feature of fixed elevation, the application of Article 10 requires only that one select an appropriate tidal datum to be used as "high tide" and compare the elevation of the feature with that datum. Since it is unquestioned that the United States uses mean high water as the datum, this would be a simple comparison between two constant numbers. Either the feature is above mean high water or it is not.

For a feature of varying height, like Dinkum Sands, I have just found that the question is whether the feature is generally above mean high water. At final argument, counsel for the United States hesitated to propose a numerical standard, but he suggested seventy-five or eighty percent of the time as a range for argument. Tr. 3466. Some further comparisons may help to determine the meaning of the requirement.

In typical circumstances, a feature of fixed height, if just high enough to qualify as an island under United States practice, can be expected to be above water always except at high

the United Kingdom itself indicates that the highest part of the Rocks is only very slightly above the highest full-tides and may be covered by them." *Id.* at 72.

tides that are higher than the mean. In an atypical situation like that of the Beaufort Sea, where seasonal changes in the water level are much greater than the twice-daily changes between high tide and low tide, all the high tides of one season may be higher than any of the high tides of another. Here too, however, a feature of fixed height that is above mean high water can be expected to remain exposed at high tide for considerable periods of the year. That is true despite the fact that, when water levels are at their highest, the feature may not be seen even at low tide.

Such a feature, constantly above mean high tide but also constantly submerged at some seasons of the year, already strains the definition of an island. Alaska emphasizes that although Dinkum Sands may be invisible in summer, when water levels are high, summer submersion is not inconsistent with its being above mean high water. AB 103-04; Tr. 3399-3400. The United States emphasizes that Dinkum Sands is invisible in winter, being entirely covered for nine months of the year by the ice pack. USB 104; Tr. 3466-67.⁶¹ These characteristics in a (hypothetical) feature of fixed height, differing from those of the prototypical island that is almost always exposed, do not invite one to relax the definition further by permitting the feature frequently to slump below mean high water.

Nor would such a relaxation be consistent with the policies expressed by the Convention as a whole.⁶² First, the Convention recognizes a separate category for features that

⁶¹ The location of Dinkum Sands may be distinguishable in winter by ice rubble. Tr. 484, 1793-94, 1856. Admitted islands, however, were described as having gravel extending above the ice even in winter. Tr. 751, 754, 1749-50.

⁶² For a general review of policy factors relevant to the definition of an island and the treatment of low-tide elevations, see Myres S. McDougal & William T. Burke, *The Public Order of the Oceans* 316-19, 387-98 (1962).

are below the high-water datum, namely low-tide elevations. Islands always generate a zone of territorial sea (unless already within inland waters), but low-tide elevations do so under Article 11 only if within "the breadth of the territorial sea from the mainland or an island." In effect, Article 11 avoids extending the territorial sea in close cases, leaving a larger expanse open to the freedom of the seas.

Navigational interests also favor using reliably visible basepoints. See Tr. 1113, 1229-30; USB 25-26.⁶³ Article 11 recognizes this interest to the extent that it denies low-tide elevations a territorial sea. Article 4(3) also provides that, where a system of straight baselines is used, "Baselines shall not be drawn to and from low-tide elevations, unless lighthouses or similar installations which are permanently above sea level have been built on them."

Both the interest in the freedom of the seas and the interest in visible basepoints imply that, if a feature frequently slumps below the high-water datum, it should not be treated as an island. Another difficulty is that, for either an island under Articles 10 and 3 or a low-tide elevation under Article 11, any territorial sea is measured from the "low-water line." For a feature that slumps not only below the high-water datum but also below the low-water datum—in the Beaufort Sea, about 6 inches below mean high water—there is during the slump no low-water line from which the territorial sea can be measured.

c. *The possibility of divided ownership*

Both parties have suggested an alternative to looking at whether Dinkum Sands is often enough above mean high water over the long term. This is to read the Convention as

⁶³ In *The Anna*, *supra* pages 290-92, the formations from which the territorial sea was measured were "always dry." 165 Eng. Rep. at 810.

making Dinkum Sands an island during such periods as it is above mean high water and as not an island the rest of the time. Joint Statement 13-14. Any revenues from resource exploitation around such a quasi-island would be divided based either on actual continuing measurements of its elevation, see Tr. 3387, or possibly on some formula using past measurements of Dinkum Sands as above or below mean high water. Although the proposal was not briefed, the United States returned to it on final argument as a fallback position, Tr. 3386-87, 3467-68, and Alaska did not reject this approach, Tr. 3443.

One could take the approach as following from the Convention, under which the normal baseline changes when the shoreline changes, and from the Court's acceptance of that consequence in the *Louisiana Boundary Case*, 394 U.S. 11, 32-35 (1969). It is certainly possible for a new island to come into existence and be recognized as such under Article 10. It is also possible for an existing island to disappear, changing the waters around it from territorial sea to high seas. The theory would be that these possibilities have been realized repeatedly at Dinkum Sands.

However, Article 10 does not demand an interpretation under which islands may frequently come and go, and there is no clear judicial precedent for it. Indeed, Dr. Symmons thought such a reading of the Convention was not even permitted, stating that "there is no such thing as an occasional . . . island." Tr. 1229.

The idea also raises practical problems. It is subject to all the difficulties of administering an ambulatory coastline, but, as noted below, there is no countervailing policy as in the *Louisiana Boundary Case*. It would invite continued difficult and expensive monitoring, and, as the present dispute demonstrates, possible further litigation over interpretation of the results of that monitoring.

To divide the ownership would, in particular, go against the Court's strong emphasis on definiteness and stability of grants under the Submerged Lands Act. When the Court first adopted the definitions in the 1958 Convention for purposes of the Submerged Lands Act, it noted that the decision "serves to fulfill the requirements of definiteness and stability which should attend any congressional grant of property rights belonging to the United States." *United States v. California*, 381 U.S. 139, 167 (1965). The Court has recently reaffirmed its purpose "to give the SLA a 'definiteness and stability.'" *United States v. Alaska*, 503 U.S. 569, 588 (1992) (permitting the Federal Government to condition approval of an artificial coastline change upon a state disclaimer of rights to accreted submerged lands).

In the *Louisiana Boundary Case*, where frequent changes in the shoreline presented a special problem, the "policy in favor of a certain and stable coastline" had to yield to the need to apply the same definitions in all the states: since the Convention determined the coastline in California, it should also do so in Louisiana. 394 U.S. at 34.⁶⁴ Such a conflict between policies does not arise with respect to Dinkum Sands, for there appears to be no authority under the Convention for treating a formation as frequently changing between island and nonisland status. I do not believe the authorities reviewed in section I(2) are contrary.

⁶⁴ The Court added that "if the inconvenience of an ambulatory coastline proves to be substantial, there is nothing in this decision which would obstruct resolution of the problems through appropriate legislation or agreement between the parties. Such legislation or agreement might, for example, freeze the coastline as of an agreed-upon date." 394 U.S. at 34. Congress has since provided for a stable coastline through its 1986 action immobilizing boundaries fixed by coordinates under a final decree of the Court. Pub. L. No. 99-272, § 8005, 100 Stat. 82, 151 (1986) (codified at 43 U.S.C. § 1301(b) (1988)).

I conclude that Dinkum Sands should be treated as a single, continuing feature, whose legal status will change only on the basis of a sustained change in its characteristics.⁶⁵

d. Application to Dinkum Sands

The evidence shows that Dinkum Sands is sometimes above mean high water and sometimes below; but not every such change in elevation is automatically to change its status as an island or not. The question remains how the evidence of its varying elevation is to be combined to yield a conclusion.

Alaska initially took the position that the "true meaning" of the evidence "places Dinkum Sands always above high water." AB 64. See also Joint Statement 14. At final argument it modified this position, emphasizing that Dinkum Sands was found to be above mean high water in three of the four years for which findings are available: 1949, when Admiral Nygren's survey described the feature as baring 3 feet at mean high water; 1982, when Dinkum Sands was seen 1.2 feet above mean high water on July 7; and 1983, when it was surveyed several times and had a maximum height of 3.8 feet above mean high water. Tr. 3429-30, 3443-44, 3446, 3448. In Alaska's view, these results "represent the true

⁶⁵ This is not to say that dividing the ownership of submerged lands at Dinkum Sands would be undesirable as the result of a negotiated settlement. On the contrary, this solution commends itself to anyone experienced in the settlement of large economic stakes as an alternative to protracted litigation. But sophisticated counsel and parties are fully able to evaluate their own vital interests. Here, moreover, the parties point to certain legal inhibitions or lack of authority relating to the consensual disposition of the people's property. In any case, it is not a Special Master's function to recommend a compromise solution that is independent of legal principles. *Vermont v. New York*, 417 U.S. 270 (1974); see *New Hampshire v. Maine*, 426 U.S. 363 (1976).

long-term status of Dinkum Sands," and its behavior in 1981, during the joint monitoring project, was anomalous. Tr. 3446.

The United States does not deny that Dinkum Sands was above mean high water at the time of the 1949-50 survey, but it says, based on the *Merrick's* 1955 report that the feature was not there, that it did not continue above mean high water beyond 1955. As to the weight of the joint monitoring project compared to other measurements, the United States does not contend that the project results are binding, but it does argue that the joint project was the longest study made of Dinkum Sands and that it was intended by the parties to provide the facts needed to determine whether Dinkum Sands is an island. Tr. 3363-64, 3367-68, 3371, 3464-65.

I believe that my recommendation should rest primarily on the most recent period, 1981 through 1983. Within this period, I do not find the 1982 and 1983 measurements in general to be less reliable than those from 1981. Some of the later measurements were made just as carefully as those during the joint project, and most of them were far enough above mean high water so as not to depend on accuracy to hundredths or even tenths of a foot. On the other hand, it is important to consider all of the 1982 and 1983 measurements, not just those made early in the season.

The evidence for 1981-83 was summarized at the beginning of this section, *supra* pages 287-88. Although it shows Dinkum Sands sometimes above mean high water and sometimes below, the evidence is not conflicting. It simply shows that the formation does not behave exactly the same way every year. This is not surprising, since it is a creature of natural processes that are themselves not wholly uniform from year to year.

The parties agree that whether Dinkum Sands is an island is to be decided according to the preponderance of the evidence. Tr. 3381 (United States), 3411 (Alaska). The pre-

ponderance of the evidence is that, in one year of the three (1981), Dinkum Sands was consistently below mean high water and, in two years of the three (1981 and 1982), it was below mean high water by the end of the open-water season.⁶⁶

I concluded in section 3(a) that Article 10(1) requires an island to be "above water at high tide" at least "generally," "normally," or "usually." In section 3(b) I concluded that a feature does not meet the standard if it frequently slumps below the high-water datum. On the evidence before me, I find that Dinkum Sands is frequently below mean high water and therefore does not meet the standard for an island.⁶⁷

It may be that Dinkum Sands did qualify as an island in 1949-50. If so, its status has changed since then. As noted in section 3(c), another sustained change in its characteristics could conceivably take place in the future. The present evi-

⁶⁶ Dinkum Sands' loss of elevation during the summer appears to be part of a regular pattern. Even in 1983, it dropped from 3.8 feet above mean high water on July 28 to only 0.3 foot above mean high water on September 11. A similar pattern is shown in the observations from 1979 and 1980, when there is again some evidence that the formation fell below mean high water during the summer. See *supra* pages 246-48. Dinkum Sands may thus have fallen below mean high water in at least four of the five summers from 1979 to 1983.

⁶⁷ This is hardly the first time that the Court has been asked to rule on important issues of first impression in the face of a measure of uncertainty. In the instant case, the parties made a record comprising voluminous and challenging documentary evidence and expert testimony, briefing, and argument. At the same time, they undertook to tolerate recommendations based on estimates, unavoidably so because of incomplete information. See *supra* note 34 and accompanying text.

As I have stated elsewhere as chair of a presidential board, "[I] believe that the [findings and] recommendations proposed by this [Report] provide as much certainty as an uncertain real world will allow." Report to the President by Emergency Board No. 151 (appointed by Exec. Order 11,042, 3 C.F.R. 626 (1959-63)) (Southern Pac. Co. & Brotherhood of Ry. Clerks, Nat'l Mediation Bd. Case No. A-6617), at 25 (1962).

dence, however, is not strong enough to support predictions about the behavior of the feature in years after 1983.

J. Conclusion

I conclude that, on the evidence available, Dinkum Sands is not generally above mean high water and so not "above water at high tide" in the sense required by Article 10 of the Convention. I therefore recommend a holding, in answer to question 5, that Dinkum Sands is not an island constituting part of Alaska's coastline for purposes of delimiting Alaska's offshore submerged lands.

VI THE ARCO PIER EXTENSION

In 1976, under permit from the Army Corps of Engineers, the Atlantic Richfield Company built a 5605-foot extension to an existing dock facility at the west side of Prudhoe Bay. See figure 1.1. The dispute over this facility—the "ARCO pier"—concerns the effect of the extension on Alaska's coastline for purposes of the Submerged Lands Act, 43 U.S.C. §§ 1301–1315 (1988). Question 6 of the Joint Statement asks:

Should the extension of the Arco Pier constructed in 1976 be considered a part of the mainland for the purposes of measuring the three-mile Submerged Lands Act grant to Alaska in this portion of the leased area (assuming the submerged lands involved do not belong to Alaska on some other basis).

The parties agree that the pre-1976 part of the pier does count as part of the mainland, and they agree that the extension "would normally qualify" in the same way. Joint Statement 15. But the United States makes several arguments as to why the pier extension was exceptional and so should not be considered part of the mainland. These arguments are considered below.

Figure 6.1 shows the initial part of the pier and the 1976 extension. As the figure shows, about 476 acres of submerged lands are within three miles of the pier extension but are not otherwise within the three-mile limit. This is the area disputed in question 6. The assumption mentioned in question 6, that the submerged lands do not belong to Alaska on some other basis, has been confirmed by the answers already given to questions 2, 3, and 4 in section III of this report.

Only documentary evidence was offered on question 6, which was heard, briefed, and argued along with the

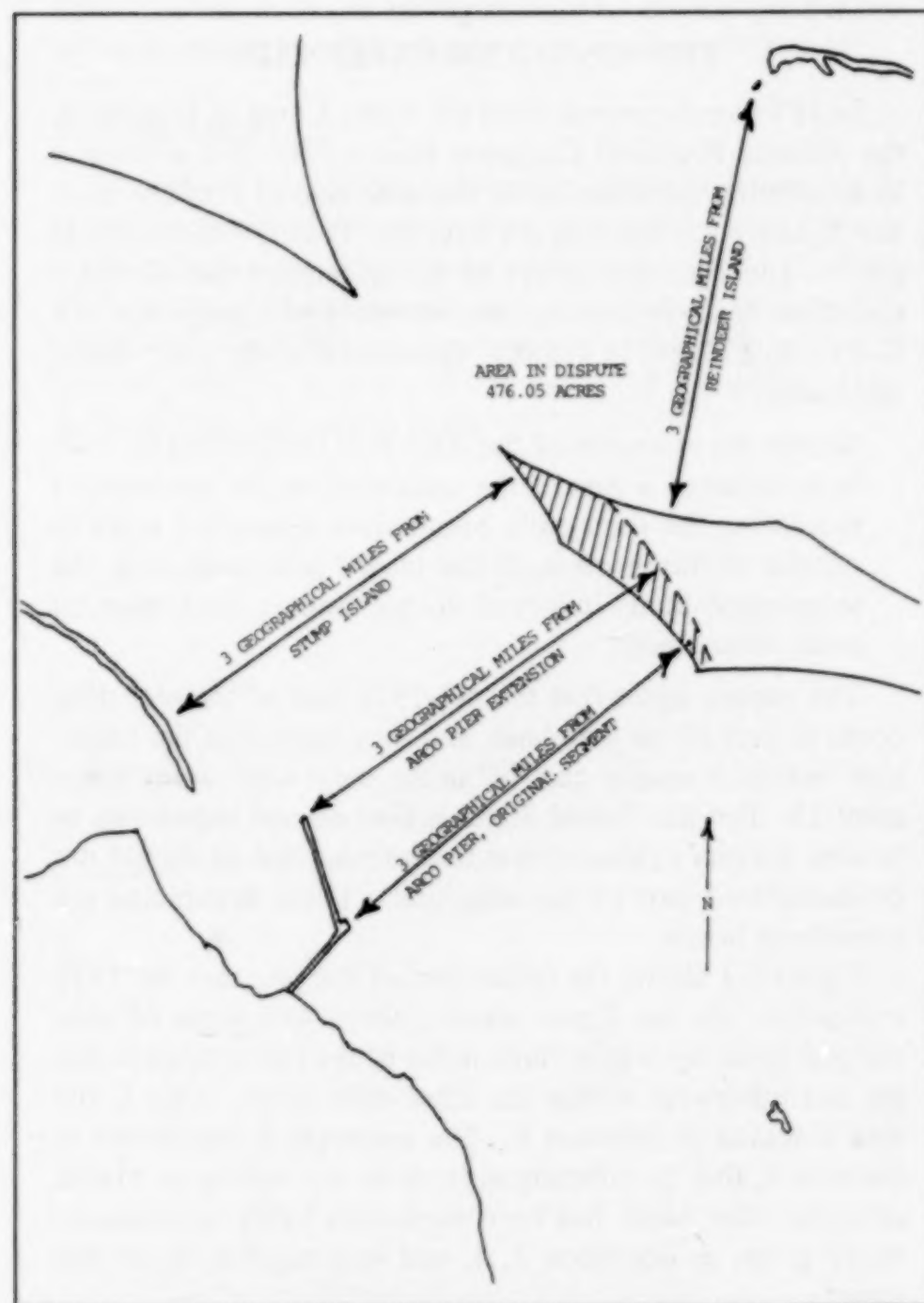


Figure 6.1. The ARCO pier and the 1976 extension.

questions treated in sections VIII and IX, *infra*.¹ The Master, accompanied by counsel for both parties, has also made a site visit to the pier.²

A. The Submerged Lands Act and the Convention

Under the Submerged Lands Act, Alaska is entitled to the lands beneath navigable waters within its boundaries. § 3(a), 43 U.S.C. § 1311(a). These include lands out to “a line three geographical miles distant from the coast line.” § 2(a)(2), 43 U.S.C. § 1301(a)(2). The coastline is defined as “the line of ordinary low water along that portion of the coast which is in direct contact with the open sea and the line marking the seaward limit of inland waters.” § 2(c), 43 U.S.C. § 1301(c). For the purpose of question 6, it is the first part of this definition that is relevant: “the line of ordinary low water along that portion of the coast which is in direct contact with the open sea.”

The Court has determined that the coastline, for purposes of the Submerged Lands Act, is in general to be the same as the baseline for purposes of the Convention on the Territorial Sea and the Contiguous Zone, *done* Apr. 29, 1958, 15 U.S.T. 1606, 516 U.N.T.S. 205. *United States v. California*, 381 U.S. 139, 165 (1965). Furthermore, the Court has estab-

¹ The relevant briefs will be referred to as AB, USB, ARB, and USB. Their full titles are: Alaska’s Brief after July 28–29, 1980 Hearing before Special Master; Post Trial Memorandum of the United States on Issues 6, 7, 8, 9, 10 and 11; Alaska’s Reply Brief; Post Trial Reply Brief for the United States on Issues 6, 7, 8, 9, 10 and 11. In contrast to the other issues covered in these briefs, no supplemental briefings were required on the ARCO pier extension.

² Since the case was heard, the pier has been extended again. The further extension was made under an agreement in which Alaska disclaimed any change in its rights under the Submerged Lands Act as a consequence of the extension. See *United States v. Alaska*, 503 U.S. 569, 592 n.14 (1992).

lished that the location of the coastline was not fixed permanently as of the passage of the Submerged Lands Act in 1953. Rather, the coastline—and hence the dividing line between federal and state rights—may vary with both artificial changes and natural changes in the shoreline. *United States v. California*, 381 U.S. at 176–77; *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 32–34 (1969).

B. The pier extension as a permanent harbor work

1. Articles 3 and 8 of the Convention

The Convention contains two articles that may be relevant to the status of the 1976 ARCO pier extension:

Article 3

Except where otherwise provided in these articles, the normal baseline for measuring the breadth of the territorial sea is the low-water line along the coast as marked on large-scale charts officially recognized by the coastal State.

Article 8

For the purpose of delimiting the territorial sea, the outermost permanent harbour works which form an integral part of the harbour system shall be regarded as forming part of the coast.

The Court has commented in two cases on the relation between Articles 3 and 8. In each case, the conclusion was that neither article was satisfied. In the *Louisiana Boundary Case*, 394 U.S. 11, 36–40 (1969), the Court rejected an argument that dredged channels leading to inland harbors were themselves covered by Article 8. Even if the underwater channels were “harbour works” forming “an integral part of the harbour system,” they could not be “regarded as forming part of the coast” under Article 8 because they did not have low-water lines as required by Article 3. 394 U.S. at 37–38.

The Court explained that Article 8 was not an exception to Article 3:

Louisiana argues that, in view of the proviso “[e]xcept where otherwise provided in these articles,” the United States cannot maintain that a dredged channel is not a baseline just because it has no low-water line. Article 8, it is said, is one of the provisions covered by the exception in Article 3. This argument, however, founders on the language of Articles 3 and 8. The exception in Article 3 refers to methods of determining the baseline other than by the low-water mark along the coast. Article 8 does not provide such an alternative method, but merely identifies certain structures which are to be considered part of the coast.

Id. at 38 n.44.

The second case in which the Court commented on the relationship between the two articles was *United States v. California*, 447 U.S. 1 (1980). Here the Court dealt with structures that were raised above the ocean surface on pilings. The Court agreed with its Special Master that the structures did not extend California’s coastline. As to Article 3 and its relationship to Article 8, the Court said:

Open piers, such as those at issue here, are elevated above the surface of the ocean on pilings. Accordingly, they do not conform to the general rule for establishing a baseline from which to measure the extent of a coastal state’s jurisdiction. . . . The type of construction of the piers does not, without more, require a determination adverse to California. . . . But the absence of a “lower low-water line” deprives the piers of a “normal baseline,” and precludes them from falling within the ambit of Art. 3.

The ultimate conclusion of the Special Master implicitly recognizes this proposition. . . . [B]y considering and disposing of California’s claim under Art. 8 of the Con-

vention, in effect on [an?] exception to the general rule embodied in Art. 3, . . . he necessarily found the criteria of Art. 3 were not satisfied.

Id. at 6. The Court then went on to find that the piers were not harbor works. *Id.* at 7.

2. The question of permanence

In contrast to the underwater channels of the *Louisiana Boundary Case* and the above-water piers of *California*, the ARCO pier extension undisputedly does have a low-water line as contemplated by Article 3. It is composed of gravel fill, in volume about 300,000 cubic yards, compacted into a structure 5605 feet long and, at its level surface, 30 to 50 feet wide. The fill is from 10 to 20 feet deep, rising above water depths of 5 to 12 feet. See U.S. Exs. 74 and 75 (original application and plans for the pier extension); Ak. Ex. 131 (finding that the structure conforms to permit conditions).

Alaska suggests that nothing more is required to make the pier extension part of the baseline under the Convention. Tr. 2502. The United States takes the position that the pier extension, being a harbor work, must also satisfy Article 8. If it can form part of the baseline merely by virtue of Article 3, the United States argues, then there is no role for the Article 8 requirement that harbor works be permanent. Tr. 2450-51. Although Alaska agrees that the pier extension is a harbor work, the parties disagree on whether it is permanent.

Without taking a position on the role of Article 8, I turn to the arguments over permanence. These do not rest on the physical characteristics of the pier extension, for, as already noted, the parties agree that it is "a solid structure that would normally qualify" as part of the coastline. Joint Statement 15. Rather, the United States says that the structure is exceptional because of its legal status.

Under legislation of long standing, any construction af-

fecting navigable waters requires a permit from the Army Corps of Engineers.³ The United States points out that in the construction permit issued to ARCO, the Corps of Engineers reserved the right to order removal of the structure.

The United States relies on two paragraphs of the permit. The first of these provides:

ERECTION OF STRUCTURE IN OR OVER NAVIGABLE WATERS: That the permittee, upon receipt of a notice of revocation of this permit . . . shall, without expense to the United States and in such time and manner as the Secretary of the Army or his authorized representative may direct, restore the waterway to its former conditions. . . .

Joint Statement 15a. At final argument, it was brought out that this provision is not unique to the ARCO pier extension but is a standard provision in permits issued by the Corps of Engineers. See Tr. 2456, 2501-02. See also 33 C.F.R. § 209.120, App. C, at 397 (1976) (standard form of permit, including the same paragraph). The paragraph therefore makes the pier extension no less permanent than other structures built under permit from the Corps.⁴

³ The Rivers and Harbors Appropriation Act of 1899 prohibits "the building of any . . . structures in any . . . water of the United States . . . except on plans recommended by the Chief of Engineers and authorized by the Secretary of the Army." Ch. 425, § 10, 30 Stat. 1121, 1151 (1899) (as codified at 33 U.S.C. § 403 (1988)).

In addition, the Federal Water Pollution Control Act provides that "[t]he Secretary of the Army, acting through the Chief of Engineers, may issue permits . . . for the discharge of dredged or fill material into the navigable waters . . ." Pub. L. No. 92-500, sec. 2, § 404(a), 86 Stat. 816, 884 (1972) (codified as amended at 33 U.S.C. § 1344(a) (1988)).

⁴ As to the conditions for revoking a permit, these are also provided for in the Code of Federal Regulations and incorporated in the permit itself. The gist is that a permit can be revoked either (1) for violation of the permit conditions or (2) upon a finding that revocation would be in the public interest. The permittee is entitled to request a public hearing

The second paragraph on which the United States relies is specific to the ARCO pier extension, and its evaluation requires some additional background. In 1973, Congress had passed the Trans-Alaska Pipeline Authorization Act, Pub. L. No. 93-153, title II, 87 Stat. 569, 584 (1973) (codified at 43 U.S.C. §§ 1651-1655 (1988)). By 1975, the pipeline was under construction, and the oilfield operators, ARCO and BP Alaska Inc., were working to be able to produce oil as soon as the pipeline was ready. Equipment needed for the oilfield development was transported from Seattle and unloaded from barges at Prudhoe Bay. In October 1975, at the end of the summer shipping season, barges carrying necessary equipment became trapped in ice before they could be unloaded. To make unloading possible before ice breakup the following July, ARCO proposed to extend the dock to meet the barges.

On October 8, 1975, ARCO applied to the Corps of Engineers for permission to extend the dock, and it requested emergency processing of the application. U.S. Ex. 73.⁵ The permit was granted on January 8, 1976, subject to various conditions. The United States points to paragraph c(1), calling for environmental studies of the structure, as showing that its authorization was only temporary:

c. That structure shall be removed by the permittee commencing on 30 June 1976, unless the permittee has satisfied the District Engineer of sufficient progress toward the following permit conditions:

(1) That the permittee shall conduct or bear the cost of

on the grounds for revocation. See "General Conditions," Joint Statement 13a-15a; 33 C.F.R. § 209.120, App. C, at 395-96 (1976).

⁵ The date typed on the application, U.S. Ex. 73, is November 8, 1975. For documents indicating that October 8, 1975, is the correct date, see the permit, Joint Statement 12a, and Ak. Ex. 119.

conducting studies designed by the resource agencies to determine the environmental impact of the structure. Subject to the results of these studies and recommendations of the National Marine Fisheries Service, Fish and Wildlife Service, Environmental Protection Agency and/or agencies of the State of Alaska, based on these findings, the District Engineer may direct the permittee to leave in place, remove or modify the emergency structure.

(2) That the permittee shall prepare a plan that demonstrates that the facilities conform with an accepted and unitized long-range plan for marine cargo handling in the Prudhoe Bay area.

Joint Statement 16a-17a.

The record indicates that paragraph c no longer provides a potential ground for ordering removal of the pier extension. Alaska has supplied numerous documents evidencing ARCO's work toward meeting the stated conditions. Ak. Exs. 121-133. They begin with a letter of February 27, 1976, by which ARCO submitted to the District Engineer an outline of its proposed program of studies (Ak. Ex. 121). They continue through October 1976, when ARCO submitted reports from two of the studies (Ak. Exs. 132-133). They conclude with a report by the Corps of Engineers dated October 1977 stating, "The causeway is complete and conforms to permit conditions" (Ak. Ex. 131).

The United States suggests in passing that Alaska also gave only a temporary authorization for the pier extension. It does appear to be the case that Alaska retained an independent power to require removal of the structure. In an agreement between ARCO and the Alaska Department of Natural Resources, concluded December 5, 1975, the State agreed to issue certain letters of nonobjection and ARCO agreed, among other things:

That the State may exercise its authority to order removal, use restrictions, or modifications beginning as early as June 30, 1976, or at any time thereafter that the state procedures have been satisfied and adequate factual basis exists for decision. Such decision may, at the option of the State, be deferred pending one or more seasons of use of the structure and further studies regarding the environmental impact of the structure.

Ak. Ex. 112, U.S. Ex. 76. In contrast to the conditions of the federal permit, the record does not include evidence that the State considered this condition to have been discharged. On the other hand, there is nothing to suggest that the results of the studies commissioned by ARCO under the federal permit conditions were not equally acceptable to the State.

Finally, in an argument separate from the permit conditions, the United States says that ARCO did not intend the pier extension to be permanent. The immediate purpose, it is agreed, was to permit unloading of the ice-locked barges in the winter of 1976. Any use beyond that, the United States notes, was to be "in support of operations related to oil development and operation of the trans-Alaska pipeline in Prudhoe Bay." USB 52. The United States reasons that because "oil operations are finite by reason of the nature of the resource," the pier extension must have been intended to be temporary. *Id.*

This argument is without merit. In the first place, it confuses the existence of the pier extension with its function. Even if the facility should fall into disuse, it will not thereby vanish from the shoreline. Second, the argument suggests that harbor works cannot be called permanent unless they have an infinite life expectancy. But the meaning of "permanent" is closer to "continuing indefinitely" than to "continuing infinitely." *E.g., Texas & Pac. Ry. v. Marshall*, 136 U.S. 393, 403 (1890). The *Oxford English Dictionary*

(compact ed. 1971) gives as the first meaning of "permanent":

Continuing or designed to continue indefinitely without change; abiding, lasting, enduring; persistent. Opposed to *temporary*.

Webster, in distinguishing "permanent" from synonyms such as "lasting," says that "permanent" usually adds "the implication of being designed or planned to stand or continue indefinitely." *Webster's Ninth New Collegiate Dictionary* 675, s.v. "lasting" (1987). According to *Black's Law Dictionary* 1139 (6th ed. 1990), "permanent" is "[g]enerally opposed in law to 'temporary,' but not always meaning 'perpetual.' "

A long-term use, indefinite in duration, was in fact contemplated for the pier extension. In early negotiations, ARCO declined to agree to remove the structure after unloading of the barges, and it made clear that it anticipated a continuing use.⁶ The Corps of Engineers permit also looked toward a long-term use, in condition c(2), as already quoted:

⁶ At a first meeting on ARCO's application, held on October 16, 1975, and including both federal and state agencies, Alaskan officials specifically suggested that the dock be considered temporary. Ak. Ex. 110, para. 8. ARCO's response is summarized in the minutes of the meeting as follows:

Mr. Carr [of ARCO] tried to summarize the feelings of the group by stating that everyone agrees to the emergency and the environmental considerations in Prudhoe Bay. ARCO is willing to consider other conditions, but is concerned about the cost of [t]he recommended stipulations—such as removal of the dike—and would hate to say now that they could agree to such a condition.

Id., para. 9. Another meeting the next day resulted in ARCO's agreeing to essentially the same conditions that were ultimately placed in the permit, including the following paragraph:

Permittee shall prepare a plan that demonstrates that the facilities con-

(2) That the permittee shall prepare a plan that demonstrates that the facilities conform with an accepted and unitized long-range plan for marine cargo handling in the Prudhoe Bay area.

Although there are powers that might still be exercised to order removal of the pier extension (*supra* pages 317, 319),

form with an accepted and unitized long-range plan for marine cargo handling in the Prudhoe Bay area.

Ak. Ex. 111.

On November 8, 1975, ARCO wrote to the Commissioner of the Alaska Department of Natural Resources:

While we are primarily interest[ed] in solving the present emergency, we see a continuing need for the causeway extension for barge shipments in subsequent years and possibly for water flood facilities directly connected to Prudhoe Bay Field production. Under the circumstances we question whether we should be exposed to the risk and expense of removing the dock extension prior to the completion of the field facilities and request your concurrence.

U.S. Ex. 75. A supporting letter from BP Alaska concurred:

In our opinion the causeway will have a long term use for the Prudhoe Bay field operations. It will have particular value in 1976 when there will be another 35 to 40 barges of supplies to be unloaded. The proposed new causeway, extending into deeper water and allowing direct unloading of large, ocean going barges will considerably increase the efficiency of unloading operations and make them far less vulnerable to weather and ice conditions. As regards the possible effect of the causeway on marine life, if it is clearly shown in the future that the causeway has a serious effect then we would consider such alternatives [sic] that would alleviate the problem.

Id. When ARCO and the State finally reached agreement on December 5, the condition included—similar to that in the federal permit—was that ARCO would “prepare a plan that demonstrates that the structures conform with an accepted and unitized long range plan for marine cargo handling and other petroleum related activities in the Prudhoe Bay area.” U.S. Ex. 76, Ak. Ex. 112. For the development and submission of the plan during 1976, see Ak. Exs. 121, 124, 127, and 132.

their existence sets no particular limit on the future of the structure.⁷

I therefore find that the ARCO pier extension built in 1976 qualifies as a permanent harbor work and forms part of the baseline under Articles 3 and 8 of the 1958 Convention.

C. The Convention as controlling

The United States maintains that, even if the pier extension does form part of the baseline under the Convention and so is used in delimiting the territorial sea claimed against other nations, still it should not be considered part of the coastline for purposes of delimiting the federal-state boundary under the Submerged Lands Act. The arguments here are based on the circumstances under which the Corps of Engineers issued the permit to extend the pier. The central circumstance is not an action but an omission: the United States did not seek an agreement with Alaska about the effect the construction would have on the boundary between federal and state submerged lands.

1. Background

The Court recognized the possibility of making such agreements when it first adopted the Convention for purposes of measuring grants under the Submerged Lands Act. *United States v. California*, 381 U.S. 139 (1965). Under the heading “Artificial Accretions,” *id.* at 176–77,⁸ the Court first summarized the 1952 report of Special Master William

⁷ Indeed, the building of a further extension beyond the one disputed here adds to the likelihood that it will have a long duration. See *supra* note 2.

⁸ The Court also included a section headed “Harbors and Roadsteads,” in which it quoted Article 8 and took that article to define the line incorporated in the Submerged Lands Act. 381 U.S. at 175.

H. Davis (*supra* section III, pages 103-04). The Master, writing before the Submerged Lands Act and on the premise that lands seaward of the baseline belonged to the Federal Government rather than the states, had ruled that lands once submerged but since "enclosed or filled [by means of artificial structures] belonged to California because such artificial changes were clearly recognized by international law to change the coastline." 381 U.S. at 176. The Master had added, however, that this did not leave the State free to extend its coastline at will. He "recognized that the United States, through its control over navigable waters, had power to protect its interests from encroachment by unwarranted artificial structures, and that the effect of any future changes could thus be the subject of agreement between the parties."

Id. The Court agreed with the Master's conclusions:

We think . . . when a State extends its land domain by pushing back the sea . . . its sovereignty should extend to the new land The considerations which led us to reject the possibility of wholesale changes in the location of the line of inland waters caused by future changes in international law, *supra*, pp. 166-167, do not apply with force to the relatively slight and sporadic changes which can be brought about artificially. Arguments based on the inequity to the United States of allowing California to effect changes in the boundary between federal and state submerged lands by making future artificial changes in the coastline are met, as the Special Master pointed out, by the ability of the United States to protect itself through its power over navigable waters.

Id. at 177 (footnote omitted).⁹

⁹ The Court has also mentioned the possibility of federal-state agreements with respect to natural changes in the shoreline. *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 34 (1969). See *supra* section V, note 64 and accompanying text.

The passage just quoted surely contemplates that, if the United States does not exercise its power over navigable waters in order to protect itself against the effects of new construction on the federal-state boundary, then the coastline under the Submerged Lands Act will follow the baseline under the Convention.

Since the *California* case, the Federal Government has developed procedures aimed at protecting its interests as suggested in *California*. Permits issued by the Army Corps of Engineers have sometimes been conditioned on a state's agreement not to claim any new rights under the Submerged Lands Act on account of the construction. For example, in a separate case involving Alaska, the Army required such a disclaimer from the State before authorizing construction of port facilities for the city of Nome. The Court upheld the authority of the Secretary of the Army to impose such conditions. *United States v. Alaska*, 503 U.S. 569 (1992).¹⁰ In passing, the Court recognized that the Secretary might not require a disclaimer in every situation:

[I]n those circumstances in which the Secretary does not require a disclaimer and the three-mile federal-state boundary extends from the new base line, presumably should there arise any of the federal-state problems Alaska identifies, changes in nautical maps could readily be amended to reflect such changes.

Id. at 1617.

2. The argument from emergency

Since the United States and Alaska did not make an agreement as to the effect the ARCO pier extension would

¹⁰ Another example is the second extension to the ARCO pier, mentioned *supra* notes 2 and 7 but not in issue here. For the text of Alaska's disclaimer as to the second extension, see *United States v. Alaska*, 503 U.S. 569, 592 n.14 (1992).

have on the coastline, it would ordinarily follow that the effect of the extension depends only on the Convention. The United States argues, however, that the Convention should not be applied because the permit was issued in an emergency that left no time for negotiating an agreement with Alaska.

There is no doubt that the situation in which the pier extension was built was viewed on all sides as an emergency situation. As the United States points out, the Trans-Alaska Pipeline Authorization Act, passed in 1973, clearly made the construction and operation of the pipeline a national priority. In this Act Congress found that the "early development and delivery of oil and gas from Alaska's North Slope" was in the national interest; and it sought "the earliest possible construction" of the pipeline, to be carried out "without further administrative or judicial delay or impediment." 43 U.S.C. §§ 1651(a), 1651(c), 1652(a). The mandate extended to related facilities as well as the pipeline itself. Thus, Congress directed "appropriate federal officers and agencies to issue . . . permits . . . that are necessary for or related to the construction, operation, and maintenance of the trans-Alaska oil pipeline system"; and it authorized such officers and agencies to "waive any procedural requirements of law or regulation" in order to accomplish the purpose. 43 U.S.C. §§ 1652(b), 1652(c).¹¹

¹¹ The Act provides, at 43 U.S.C. §§ 1651-1652 (1988):

§ 1651. Congressional findings and declaration

The Congress finds and declares that:

(a) The early development and delivery of oil and gas from Alaska's North Slope to domestic markets is in the national interest because of growing domestic shortages and increasing dependence upon insecure foreign sources.

....

(c) The earliest possible construction of a trans-Alaska oil pipeline from the North Slope of Alaska to Port Valdez in that State will make

When ARCO's barges became ice-locked in October 1975, the pipeline was scheduled for completion in 1977. In applying for a permit to extend the dock, ARCO requested emergency processing of its application. U.S. Ex. 73.¹² The application explained:

the extensive proven and potential reserves of low-sulfur oil available for domestic use and will best serve the national interest.

§ 1652. Authorizations for construction

(a) Congressional declaration of purpose

The purpose of this chapter is to insure that, because of the extensive governmental studies already made of this project and the national interest in early delivery of North Slope oil to domestic markets, the trans-Alaska oil pipeline be constructed promptly without further administrative or judicial delay or impediment. To accomplish this purpose it is the intent of the Congress to exercise its constitutional powers to the fullest extent in the authorizations and directions herein made and in limiting judicial review of the actions taken pursuant thereto.

(b) Issuance, administration, and enforcement of rights-of-way, permits, leases, and other authorizations

The Congress hereby authorizes and directs the Secretary of the Interior and other appropriate federal officers and agencies to issue and take all necessary action to administer and enforce rights-of-way, permits, leases, and other authorizations that are necessary for or related to the construction, operation, and maintenance of the trans-Alaska oil pipeline system, including roads and airstrips, as that system is generally described in the Final Environmental Impact Statement issued by the Department of the Interior on March 20, 1972. . . .

(c) . . . [W]aiver of procedural requirements . . .

. . . Federal officers and agencies . . . may waive any procedural requirements of law or regulation which they deem desirable to waive in order to accomplish the purposes of this chapter. . . .

¹² The Corps of Engineers regulation as to emergency processing read as follows:

(viii) If the circumstances surrounding a permit application require emergency action and the District Engineer considers that the public interest requires that the standard procedures must be abbrevi-

Due to late arrival of barges at Prudhoe Bay caused by ice conditions; dock extension, exclusive of existing dock, is needed to assure timely off loading, delivery and installation of production facilities related to Trans Alaska Pipeline (TAPS) projected startup and crude oil throughput.

U.S. Ex. 73. In meetings and letters ARCO repeated that it would be hard-pressed to put oil in the pipeline on schedule unless the barges could be unloaded before the next summer. See U.S. Exs. 74, 75, 78. The Corps of Engineers and officials responsible for the pipeline agreed that emergency action was called for. See Ak. Exs. 119, 120. When the permit was granted in January 1976, ARCO agreed to certify "that construction of the proposed structure in accordance with the inclosed plans is necessary because of a bona fide emergency." Joint Statement 16a.

The United States makes two points as to the effect of the emergency. First, it suggests that because the time was so short it had no practical opportunity to negotiate an agreement with Alaska. Second, the United States says that because the project was necessary to advance a national priority, it might not have been able to hold out for an agreement from Alaska not to claim new rights to submerged lands.

Alaska replies, "Reduced to its essentials, the argument is that the Federal executive did not negotiate an agreement at the time because of practical considerations and, therefore, that the Federal judiciary should now impose one." ARB 37.

ated in the particular case, he will explain the circumstances and recommend special procedures to the Chief of Engineers, ATTN: DAEL-CWO-N by teletype. The Chief of Engineers, upon consultation with the Secretary of the Army or his authorized representative and other affected agencies, will instruct the District Engineer as to further processing of the application.

33 C.F.R. § 209.120(i)(2)(viii) (1976), 40 Fed. Reg. 31,322 (July 25, 1975).

It also observes that "the United States could not necessarily have obtained the result it now seeks had there been no emergency." ARB 39. I think Alaska is right on both points. Nothing in the rationale of *California* suggests that, when the impetus to extend the coastline comes not from the state but from the implementation of a national policy, the United States is entitled to be relieved of any negative consequences of the extension whether or not the state agrees to give up the corresponding benefit. I conclude that the existence of an emergency was not enough to relieve the United States of the burden of seeking an agreement from Alaska before issuing ARCO a permit to build the pier extension.

3. *The argument from the regulations*

The United States also argues that the permit to extend the pier was issued by the Corps of Engineers in violation of its own regulations. In recognition of the Court's discussion in *California*, 381 U.S. at 176-77, the Corps had adopted a regulation requiring that, before issuance of a permit for work that might affect the location of the coastline, the decision must be coordinated with the Solicitor of the Department of the Interior and the Attorney General. 33 C.F.R. § 209.120(g)(10) (1976).¹³ The regulation did not mention

¹³ The version of the regulation current in 1975 appears at 33 C.F.R. § 209.120(g)(10) (1976), as follows:

§ 209.120. Permits for activities in Navigable Waters or Ocean Waters.

....
(g) *Policies on particular factors of consideration.* ...

....
(10) *Effect on limits of the territorial sea.* Structures or work affecting coastal waters may modify the coast line or baseline from which the three mile belt is measured for purposes of the Submerged Lands Act and International Law. Generally, the coast line or base line is the line of ordinary low water on the mainland; however, there

the purpose of providing opportunity to seek state disclaimers of additional submerged lands, but the Court has held that this may be inferred from the regulatory scheme. *United States v. Alaska*, 503 U.S. 569, 591 (1992). In the present proceeding the parties have both made the same inference. Joint Statement 15-16.

It is agreed that the coordination provisions of the regulation were not followed with respect to the ARCO pier extension. The Corps did not submit the matter to the Solicitor of the Department of the Interior for comment on the effect on the federal-state boundary, and there was no coordination with the Attorney General. Joint Statement 15-16. In the United States' view, the Corps of Engineers thus violated its own regulations in issuing the permit, and, "[b]ecause of this violation, the boundary of the State's submerged lands cannot be deemed to have changed." USB 48-49.

are exceptions where there are islands or low-tide elevations off shore. (See the Submerged Lands Act, 67 Stat. 29, U.S. Code section 1301(c), and *United States v. California*, 381 U.S. 139 (1965), 382 U.S. 448 (1966)). All applications for structures or work affecting coastal waters will therefore be reviewed specifically to determine whether the coast line or baseline might be altered. If it is determined that such a change might occur, coordination with the Attorney General and the Solicitor of the Department of the Interior is required before final action is taken. The District Engineer will submit a description of the proposed work and a copy of the plans to the Solicitor, Department of the Interior, Washington, D.C. 20240, and request his comments concerning the effects of the proposed work on the outer continental rights of the United States. These comments will be included in the file of the application. After completion of standard processing procedures, the file will be forwarded to the Chief of Engineers. The decision in [sic] the application will be made by the Secretary of the Army after coordination with the Attorney General.

33 C.F.R. § 209.120(g)(10) (1976); 40 Fed. Reg. 31,322 (July 25, 1975). The current version of the regulation is essentially the same. 33 C.F.R. § 320.4(f) (1994).

There are serious problems with this argument. First, it is by no means clear that the regulation was in fact violated. Under the regulation, the Secretary of the Army was responsible for making the decision on ARCO's permit application. As Alaska points out, the Trans-Alaska Pipeline Authorization Act directed federal officers and agencies to issue permits "necessary for or related to" the operation of the pipeline system, and it permitted such officers and agencies to "waive any procedural requirements of law or regulation which they deem desirable to waive in order to accomplish the purposes of" the Act. 43 U.S.C. § 1652(b)-(c), *supra* note 11. Under these provisions, the Secretary of the Army would have been justified in issuing the permit without following all the regulatory requirements, such as the requirements that there be coordination with the Solicitor of the Interior Department and the Attorney General regarding the effect of construction on submerged lands rights.

It is unknown whether the Secretary or his subordinates actually intended to invoke the statutory waiver provisions.¹⁴ The record at this point is weak. It includes a lengthy teletype, dated December 12, 1975, from the District Engineer in Alaska to the Chief of Engineers in Washington, reviewing all the circumstances and ending with the following recommendation:

Based on the proposed project's impact on the trans-Alaska pipeline projected start-up and crude oil throughput, national interest, agency input and the applicant's exploration of alternatives, it is our recommendation that the Alaska District Engineer be authorized to issue emer-

¹⁴ Besides the statutory waiver provisions, it might also be argued that the usual requirements were relaxed by the portion of the regulation governing emergency processing of permit applications. 33 C.F.R. § 209.120(i)(2)(viii) (1976), 40 Fed. Reg. 31,322 (July 25, 1975), quoted *supra* note 12.

agency approval of the revised plan to construct the proposed gravel dock extension to include the special conditions agreed to and requested by the federal and state agencies involved.

Ak. Ex. 119. The response to this teletype, as given by officials in Washington, is described only in an informal memorandum to the file written by Corps of Engineers employees in Alaska. Ak. Ex. 120. According to the memorandum, the Washington office of the Corps of Engineers gave its concurrence by telephone on December 15, 1975, upon receiving assurances that several federal agencies were in agreement.¹⁵ There is no mention of the Attorney General, with respect to a waiver or otherwise; but a waiver of the coordination requirement by the Secretary of the Army would not necessarily come up in a conversation with the District Engineer's office. The outcome on December 15 was that the Alaska office of the Corps was to notify ARCO to proceed.

The Pipeline Authorization Act does not prescribe any particular method for waiving procedural requirements. I assume that it requires no formality to effect a waiver; to hold otherwise would be to add new procedural requirements in order to get rid of others. The decision to issue the permit is entitled to a presumption of regularity. *Citizens to Preserve Overton Park, Inc., v. Volpe*, 401 U.S. 402, 415 (1971). On the administrative record before me, I cannot conclude that

¹⁵ The agencies named were the Environmental Protection Agency, the National Marine Fisheries Service, the United States Fish and Wildlife Service, the Coast Guard, and the Alaska Pipeline Office in the Interior Department. The memorandum also states the concurrence of an individual described as "Interior's General Counsel." It is the Master's understanding that this person was employed in the Solicitor's office in a section other than the one concerned with submerged lands rights and Corps of Engineers permits.

the Secretary acted in violation of the regulations rather than waiving them in compliance with law.

If it is assumed, contrary to the preceding discussion, that there was a violation of regulations in issuing the permit to ARCO, then there is a different problem with the United States' position. In the *Louisiana Boundary Case*, 394 U.S. 11 (1969), the Court considered an artificially created spoil bank that was said to have been unauthorized:

[T]o the extent that the spoil bank is an extension of the mainland and is uncovered at low tide, it must be taken into account in drawing the baseline under Article 3.

The United States contends that the spoil bank should be ignored because its construction was unauthorized; it was created by the Gulf Refining Co. under a 1956 permit which, it is said, authorized the dredging of a channel but not the creation of a spoil bank. Even assuming that the creation of the bank was not authorized (a question on which we express no opinion whatever), it would not follow that it does not constitute part of the coast. If the United States is concerned about such extensions of the shore, it has the means to prevent or remove them. See *United States v. California*, 381 U.S. 139, 177. Nor can we accept the United States' argument that a "mere spoil bank" should not be deemed part of the coast because it is not "purposeful or useful" and is likely to be "short-lived." It suffices to say that the Convention contains no such criteria.

Id. at 41 n.48. Thus, a wholly unauthorized construction extends the coastline, just as a properly authorized construction extends the coastline if no state disclaimer is obtained. As Alaska observes, it would be anomalous to conclude that an improperly authorized construction does not. Tr. 2500-01.

The United States seeks to distinguish the *Louisiana Boundary Case* as not involving the actions of a federal

agent. Tr. 2453-54. It begins from the proposition that federal agencies are bound by their own regulations. There is ample authority to this effect. Thus, in *United States v. Nixon*, 418 U.S. 683, 695 (1974), the Court said of a regulation whose effect was disputed, "So long as this regulation is extant it has the force of law." However, the Court emphasized the uniqueness of that case, *id.* at 691, 694, 697, and its facts have no parallel here.¹⁶ The situation here is also quite different from that in other cases invoking the proposition. Typically in such cases, a party is disadvantaged by some Government action and seeks to have the action set aside because of the Government's failure to follow its own rules.¹⁷

¹⁶ The regulation in question delegated certain authority of the Attorney General to a Special Prosecutor, who sought to use this authority to compel the President to produce tape recordings and documents for use in a criminal prosecution. The Court relied on the regulation in finding that there was a justiciable controversy and not merely a dispute within the Executive Branch amounting to a political question. 418 U.S. at 692-97.

¹⁷ For example, in *United States ex rel. Accardi v. Shaughnessy*, 347 U.S. 260 (1954), the Board of Immigration Appeals had denied an application by a deportable alien for suspension of deportation. The alien was held entitled to a new hearing because the Board, in reaching its prior decision, had violated a regulation by failing to exercise its independent discretion. Similarly, the Court has held that government employees may not be dismissed without following applicable regulations. *Service v. Dulles*, 354 U.S. 363 (1957); *Vitarelli v. Seaton*, 359 U.S. 535 (1959).

Not every violation, however, provides grounds for relief. In *American Farm Lines v. Black Ball Freight Service*, 397 U.S. 532 (1970), certain carriers protested when the Interstate Commerce Commission granted temporary operating authority to another carrier, American Farm Lines. The grant was made without all the supporting information called for by the regulations, but the Court upheld the ICC's action. In *United States v. Caceres*, 440 U.S. 741 (1979), an Internal Revenue Service agent recorded conversations with a taxpayer in violation of IRS regulations. The taxpayer was then prosecuted for bribing the agent, with the recordings offered as evidence. The Court held them admissible. In *Sullivan v. United States*, 348 U.S. 170 (1954), a taxpayer challenged his in-

Here, it is the United States itself that complains of the Government's action; no other party was adversely affected. In addition, the United States does not ask that the action be set aside (as by voiding the Corps of Engineers permit to ARCO). It asks only that the normal consequence of the action (the extension of the coastline to follow the new construction) be avoided.

In support of this result the United States introduces a second proposition: that the unauthorized act of a federal employee cannot be deemed to have alienated a federal property interest. Hence, the United States reasons, the issuance of the Corps of Engineers permit to ARCO cannot be deemed to have led to the loss of any federal submerged lands. For this argument it cites cases such as *Federal Crop Insurance Corp. v. Merrill*, 332 U.S. 380, 384 (1947) (government not bound by agent's misstatement that crop was insurable) and *Utah Power & Light Co. v. United States*, 243 U.S. 389, 408-09 (1916) (government not bound, notwithstanding agreement of its agents, to tolerate unauthorized use of federal lands for electric power works). In general these cases involve unsuccessful claims that the United States is estopped from disavowing some position taken by a federal employee.¹⁸ Within this line of cases, the one factually

dictment and conviction for filing fraudulent tax returns. Contrary to a Department of Justice rule, the United States Attorney had presented the evidence to the grand jury without authorization from the Attorney General's office in Washington. The Court held the indictment valid, calling the rule "simply a housekeeping provision." 348 U.S. at 173.

See generally 1 Kenneth C. Davis & Richard J. Pierce, Jr., *Administrative Law Treatise* § 6.5 (3d ed. 1994); Peter Raven-Hansen, *Regulatory Estoppel: When Agencies Break Their Own "Laws,"* 64 Tex. L. Rev. 1 (1985).

¹⁸ For an extensive recent review of the cases, see *Office of Personnel Management v. Richmond*, 496 U.S. 414 (1990) (concluding, as to monetary claims, that to permit estoppel against the Government would violate the Appropriations Clause).

closest to the present situation appears to be *United States v. California*, 332 U.S. 19 (1947). There the Court said:

Nor can we agree with California that the Federal Government's paramount rights [in the three-mile belt] have been lost by reason of the conduct of its agents. . . . [I]n [a] substantial number of instances . . . the Government acquired title from the states to lands located in the belt; some decisions of the Department of Interior have denied applications for federal oil and gas leases in the California coastal belt on the ground that California owned the lands. . . . Assuming that Government agents could by conduct, short of a congressional surrender of title or interest, preclude the Government from asserting its legal rights, we cannot say it has done so here. . . . And even assuming that Government agencies have been negligent in failing to recognize or assert the claims of the Government at an earlier date, the great interests of the Government in this ocean area are not to be forfeited as a result. The Government, which holds its interests here as elsewhere in trust for all the people, is not to be deprived of those interests by the ordinary court rules designed particularly for private disputes over individually owned pieces of property; and officers who have no authority at all to dispose of government property cannot by their conduct cause the Government to lose its valuable rights by their acquiescence, laches, or failure to act.

332 U.S. at 39-40.

Here, in contrast to the cases cited, no estoppel is asserted against the United States. The question is only what remedy is available to it (assuming that the Corps's issuance of the permit to ARCO was not authorized). Despite the Court's broad language in the *California* case, I believe that the United States' position should not be accepted here. The remedy it proposes would not simply restore the United

States to the same position as if the regulation had been followed; it would make it more than whole. What it lost by the violation, if there was one, was an opportunity to negotiate with Alaska for a disclaimer of additional submerged lands. What it now seeks is the result of a successful negotiation. But there is no way of knowing whether Alaska would have agreed to that result.¹⁹ Moreover, the lands in question are not irrevocably lost to the United States, for all agree that the Corps of Engineers can restore the coastline by ordering removal of the pier extension. See *supra* note 4 and accompanying text.

D. Conclusion

I have found that the ARCO pier extension forms part of the coast under Articles 3 and 8 of the Convention. I have also found that the determination of Alaska's coastline under the Submerged Lands Act should follow the Convention, notwithstanding the special circumstances of the pier extension. I therefore recommend that question 6 be answered in favor of Alaska, that is, that the extension of the ARCO pier constructed in 1976 should be considered a part of the mainland for the purposes of measuring the three-mile Submerged Lands Act grant to Alaska.

¹⁹ In October 1975, when ARCO first applied to Alaska for permissions concerning the pier extension, Alaska turned ARCO down. See U.S. Ex. 75. ARCO reapplied, U.S. Ex. 75, and on December 5, 1975, the State finally agreed to issue letters of nonobjection regarding the pier extension to both ARCO and the Corps of Engineers. U.S. Ex. 76. The agreement included seven paragraphs of conditions imposed on ARCO. U.S. Ex. 76.

VII LOW-TIDE ELEVATIONS

By Article 11 of the 1958 Convention, a low-tide elevation is "a naturally formed area of land which is surrounded by and above water at low-tide but submerged at high tide." Convention on the Territorial Sea and the Contiguous Zone, done Apr. 29, 1958, 15 U.S.T. 1606, 516 U.N.T.S. 205. A low-tide elevation generates a belt of territorial sea if it is close enough to "the mainland or an island." *Id.* The Court has used Article 11 in determining what submerged lands around low-tide elevations were granted to the states by the Submerged Lands Act, 43 U.S.C. §§ 1301-1315 (1988). *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11, 40-47 (1969).

Question 14 concerns the status of several features as low-tide elevations:

Are certain geographic features within the Beaufort Sea, which appear on nautical charts published by the federal government but not on maps prepared by the State of Alaska in 1981 and 1982, to be deemed low-tide elevations and thus salient points from which the submerged lands grant to Alaska is to be measured?

Apparently all the features are close enough to shore that, if they are low-tide elevations, they do carry a belt of territorial sea and a grant to Alaska under the Submerged Lands Act.¹

¹ The particular features are described as follows:

There are six areas along the north coast of Alaska where such features, if they are treated as low-tide elevations (or, *a fortiori*, as islands) will affect the seaward boundary of the State of Alaska. The first lies just west of Pogik Point. There, two small shoals are shown on the NOS charts as low-tide elevations approximately one-half mile from the mainland. If these features are deleted as salient points from which the outer boundary is delimited, the area belonging to the State of Alaska would be diminished by approximately 800 acres. The sec-

In the statement of contentions that accompanied question 14, Alaska took the position that the National Ocean Service charts, which show the features, should be controlling. The United States argued for the use of Alaska's maps, which did not show them. In part it argued that Alaska's maps, derived from aerial photography in 1981 and 1982, were based on more recent information than the federal charts.

Since these contentions were presented, the United States and Alaska have made a joint survey of the relevant areas. They now agree that the features referred to in question 14 do not exist, and they have entered a stipulation (appendix E) that question 14 may therefore "be answered in the negative without the need for further proceedings before the Special Master."²

I agree that the joint survey and stipulation are sufficient to answer question 14 in the negative. I therefore recom-

ond area is a mudflat shown on NOS charts extending north of an island just east of Pogik Bay. The effect of this feature on the area of submerged lands is approximately 200 acres. The third area is approximately 5 miles east of Pogik Bay, and consists of two features approximately one-half mile from the mainland. Approximately 1100 acres are affected by the legal treatment of these features. The fourth area is one shown on the NOS charts as a low-tide elevation approximately one mile east of Cape Halkett. This feature has an effect of approximately 2,000 acres on the outer boundary of the State of Alaska. The fifth feature is a shoal approximately 3 miles east of Atigaru Point. Upon the status of this feature depends the title to approximately 15,000 acres of submerged land. Finally, the sixth area consists of the barrier islands east of the mouth of the Canning River. These features are shown on NOS chart No. 16045 between longitude 145° 30' 43" W. and 145° 34' 34" W. A substantial area of submerged land is determined by the status of the features.

Second Supplement to Joint Statement at 3-4.

² The stipulation also identifies twelve other features, not referred to in question 14, whose existence as low-tide elevations the joint survey did establish. See appendix E.

mend that the features referred to by question 14, *see supra* note 1, are not to be deemed low-tide elevations and thus are not salient points from which the submerged-lands grant to Alaska is to be measured.

PART TWO FEDERAL RESERVATIONS

VIII

THE NATIONAL PETROLEUM RESERVE-ALASKA

For some parts of Alaska's Arctic coast, determining federal and state rights in submerged lands requires more than locating the coastline under the Submerged Lands Act and measuring a three-mile belt outward from the coastline. Where the United States has created federal reservations in coastal areas, the parties' rights depend also on the effect of the reservation. For example, reserved lands may fall within the exception to the Submerged Lands Act grant to the states provided for lands "expressly retained by . . . the United States when the State entered the Union." Submerged Lands Act § 5(a), 43 U.S.C. § 1313(a) (1988).

The National Petroleum Reserve-Alaska is one area where the scope and effect of a reservation are in question. The Reserve, comprising some 23 million acres withdrawn from the public domain, was created in 1923 by Executive Order 3797-A and was originally called Naval Petroleum Reserve No. 4.¹ Its seaward boundary runs along the Arctic

¹ The Order reads:

EXECUTIVE ORDER 3797-A

ESTABLISHING NAVAL PETROLEUM RESERVE NO. 4

WHEREAS there are large seepages of petroleum along the Arctic Coast of Alaska and conditions favorable to the occurrence of valuable petroleum fields on the Arctic Coast and,

WHEREAS the present laws designed to promote development seem imperfectly applicable in the region because of its distance, difficulties, and large expense of development and,

WHEREAS the future supply of oil for the Navy is at all times a matter of national concern,

NOW, THEREFORE, I, WARREN G. HARDING, President of the United States of America, by virtue of the power in me vested by the laws of the United States, do hereby set apart as a Naval Petroleum Reserve all of the public lands within the following described area not now covered by valid entry, lease or application:

Ocean from Icy Cape at the west to the mouth of the Colville River at the east. See figure 1.1.

Three questions in the Joint Statement and Supplement relate to the seaward boundary of the Reserve. Question 7 concerns the boundary at Smith and Harrison Bays; question 8, the boundary at Peard Bay. Question 11 asks whether the boundary crosses the openings of various other inlets, bays, and river estuaries. The parties are in agreement with respect to question 7 but not questions 8 and 11.

The Executive Order, *supra* note 1, describes the boundary of the Reserve in relevant part as follows:

Commencing at the most northwestern extremity of the point of land shown on the maps of Alaska as Icy Cape, approximately lat. $70^{\circ} 21'$, long. $161^{\circ} 46'$; thence extending in a true south course to the crest of the range of mountains forming the watershed between the Noatak River and its northern tributaries and the streams flowing into the Arctic Ocean; thence eastward along the crest of this range of mountains to a peak at the head of the northernmost of the two eastern forks of Midas Creek (Pl. 1, U.S.G.S., Bull. 536), at approximately lat. $67^{\circ} 50'$, long. $156^{\circ} 08'$; thence in a true north course to a point at the highest high water on the western or right bank of the Colville River; thence following said highest highwater mark downstream along said Colville River and the western bank of the most western slough at its mouth to the highest highwater mark on the Arctic coast. From here, following the highest highwater mark westward to the point of beginning.

The coast line to be followed shall be that of the ocean side of the sandspits and islands forming the barrier reefs and extending across small lagoons from point to point, where such barrier reefs are not over three miles off shore, except in the case of Plover Islands, from Point Tangent to Point Barrow (Pl. 3, U.S.G.S., P.P. 109), long. approximately $154^{\circ} 50'$, where it shall be the highest highwater mark on the outer shore of the islands forming the groups and extending between the most adjacent points of these islands and the sandspits at either end. In cases where the barrier reef is over three miles off shore the boundary shall be the highest highwater mark of the coast of the mainland.

Said lands to be so reserved for six years for classification, exami-

Commencing at the most northwestern extremity of the point of land shown on the maps of Alaska as Icy Cape, . . . [thence south, thence east, thence north] to a point at the highest high water on the western or right bank of the Colville River; thence following said highest highwater mark downstream along said Colville River and the western bank of the most western slough at its mouth to the highest highwater mark on the Arctic coast. From here, following the highest highwater mark westward to the point of beginning.

The coast line to be followed shall be that of the ocean side of the sandspits and islands forming the barrier reefs and extending across small lagoons from point to point, where such barrier reefs are not over three miles off shore, except in the case of Plover Islands, from Point Tangent to Point Barrow (Pl. 3, U.S.G.S., P.P. 109), long. approximately $154^{\circ} 50'$, where it shall be the highest highwater mark on the outer shore of the islands forming

nation, and preparation of plans for development and until otherwise ordered by the Congress or the President.

The reservation hereby established shall be for oil and gas only and shall not interfere with the use of the lands or waters within the area indicated for any legal purpose not inconsistent therewith.

WARREN G. HARDING

The White House

February 27, 1923

Exec. Order No. 3797-A, *microformed on Presidential Executive Orders*, Nos. 1-7403, reel 6 (Library of Congress Photoduplication Serv.), *reprinted in Joint Statement 18a-20a*.

In 1945, Acting Secretary of the Interior Abe Fortas deleted the penultimate paragraph, which limited the reservation to six years and until otherwise ordered. Public Land Order 289, 10 Fed. Reg. 9479 (1945). By 1976 legislation the Reserve was transferred to the Secretary of the Interior and renamed the National Petroleum Reserve in Alaska. Naval Petroleum Reserves Production Act of 1976, Pub. L. No. 94-258, § 102, 90 Stat. 303 (codified as amended at 42 U.S.C. § 6502 (1988)).

the groups and extending between the most adjacent points of these islands and the sandspits at either end. In cases where the barrier reef is over three miles off shore the boundary shall be the highest highwater mark of the coast of the mainland.

Hearings on questions 7, 8, and 11 were held on July 28 and 29, 1980. The issue of question 11 first arose at these hearings, Tr. 254-59, 268-69, 273, and was subsequently incorporated in a Supplement to the Joint Statement filed in September 1980. Post-trial briefs and reply briefs were filed in November 1980 and February 1981.

Thereafter, the issues were broadened. In the original Joint Statement, the parties had agreed that

The only question before this Court is the location of the seaward boundary of the Reserve, which concededly includes some submerged lands. It is agreed that whatever submerged lands are within the Reservation do not belong to Alaska, having been effectively withheld from the grant to the State at the time of its admission to the Union under both the *Pollard* doctrine and the Submerged Lands Act.

Joint Statement 17.²

In 1981, however, the appropriateness of this concession by Alaska was cast into question. The occasion was the Supreme Court's decision in *Montana v. United States*, 450 U.S. 544 (1981), which concerned a navigable river in an Indian reservation created while Montana was still a territory. The Court held that the riverbed had not been conveyed to the Indians but passed to Montana at statehood. After the *Montana* decision, Alaska asserted that it owned the sub-

² The *Pollard* case said that new states, upon their admission to the Union, receive title to the land beneath navigable waters within their boundaries. *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845). For general background see *supra* section II.

merged lands underlying tidal lagoons within the exterior boundary of the Reserve.

The United States disagreed, but it joined with Alaska in a stipulation and a joint motion, dated November 2, 1983, and October 31, 1983, respectively, requesting an order relieving Alaska from its concession and permitting briefs on the relevance of *Montana* to "tidal lagoons" within the Reserve boundary. The joint motion also sought leave for the submission of new documentation on question 8. The Master granted the joint motion on January 4, 1984.³ The parties submitted their supplementary documentation on question 8 in January 1984. Ak. Exs. 143-145; U.S. Exs. 94-95. They filed supplemental briefs and reply briefs in January and February 1984. Final argument was held on March 4, 1985. At this proceeding the parties agreed that the Master should consider the application of *Montana* to all tidal areas within the Reserve, regardless of whether such areas constitute lagoons.⁴ Tr. 2431-32, 2477.

In *Utah Division of State Lands v. United States*, 482 U.S. 193 (1987), the Court again analyzed the relation between prestatehood federal actions and a state's interest in submerged lands. It again decided in favor of the State, following *Montana* and stating that it would "not lightly infer a congressional intent to defeat a State's title to land under navigable waters." 482 U.S. at 197. Because of *Utah*, the

³ The motion, stipulation, and the Master's order also covered the relevance of *Montana* to the Arctic National Wildlife Refuge, discussed *infra* in section IX. Similarly, the parties' agreement of March 4, 1985, mentioned below, applied to the Wildlife Refuge as well as the Petroleum Reserve.

⁴ The Master is informed that the application of *Montana* to nontidal navigable inland waters in the Reserve is being litigated in the federal district court. *Alaska v. United States*, Civ. Nos. A83-343, A84-435, and A86-181 (D. Alaska, consolidated and stayed pending resolution of the present case).

parties filed second supplemental briefs and reply briefs in September and October 1987.⁵

Following the order in which the issues were raised, I begin with questions 7, 8, and 11, interpreting the Executive Order to determine whether each of the areas is inside the boundary of the National Petroleum Reserve-Alaska. I then analyze whether *Montana* and *Utah* imply that lands under tidal waters belong to Alaska even though they may be inside the Reserve boundary. Figures 8.1 through 8.3 sketch the parties' positions.

⁵ In addition, after the Court's decision in *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988), both parties wrote short letters to the Master regarding the relevance of the decision, but no further briefs were requested. *Phillips Petroleum* concerned lands under inland waters that are tidally influenced but nonnavigable. It held that such lands are subject to the *Pollard* doctrine, *supra* note 2, as elaborated in later cases such as *Shively v. Bowlby*, 152 U.S. 1 (1894).

In this section, the three sets of briefs are given the following abbreviations.

1. The original briefs (1980-81): AB, USB, ARB, USRB. The corresponding full titles are: Alaska's Brief After July 28-29, 1980 Hearing Before Special Master; Post Trial Memorandum of the United States on Issues 6, 7, 8, 9, 10 and 11; Alaska's Reply Brief; Post Trial Reply Brief for the United States on Issues 6, 7, 8, 9, 10 and 11.

2. The post-*Montana* briefs (1984): ASB, USSB, ASRB, USSRB. The corresponding full titles are: Alaska's Supplemental Brief on Questions 8, 9, 10 and 11; Supplemental Brief for the United States on Questions 8, 10 and 11; Supplemental Reply Brief [Alaska]; Supplemental Reply Brief for the United States on Questions 8, 10, and 11.

3. The post-*Utah* briefs (1987): A 2d SB, US 2d SB, A 2d SRB, US 2d SRB. The corresponding full titles are: Alaska's Second Supplemental Brief on Questions 8, 9, 10 and 11 of the Joint Statement of Questions Presented and Contentions of the Parties; Second Supplemental Memorandum of the United States on Questions 8, 9, 10 and 11; Alaska's Second Supplemental Reply Brief on Questions 8, 9, 10 and 11 of the Joint Statement of Questions Presented and Contentions of the Parties; Reply Brief for the United States in Response to Alaska's Second Supplemental Brief on Questions 8, 9, 10 and 11.

Parties' contentions regarding Questions 7, 8 and 11, and regarding the effect of *Utah v. United States* and *Montana v. United States*.

PANEL 1



Figure 8.1

Parties' contentions regarding Questions 7, 8 and 11, and regarding the effect of
Utah v. United States and Montana v. United States.

PANEL 2

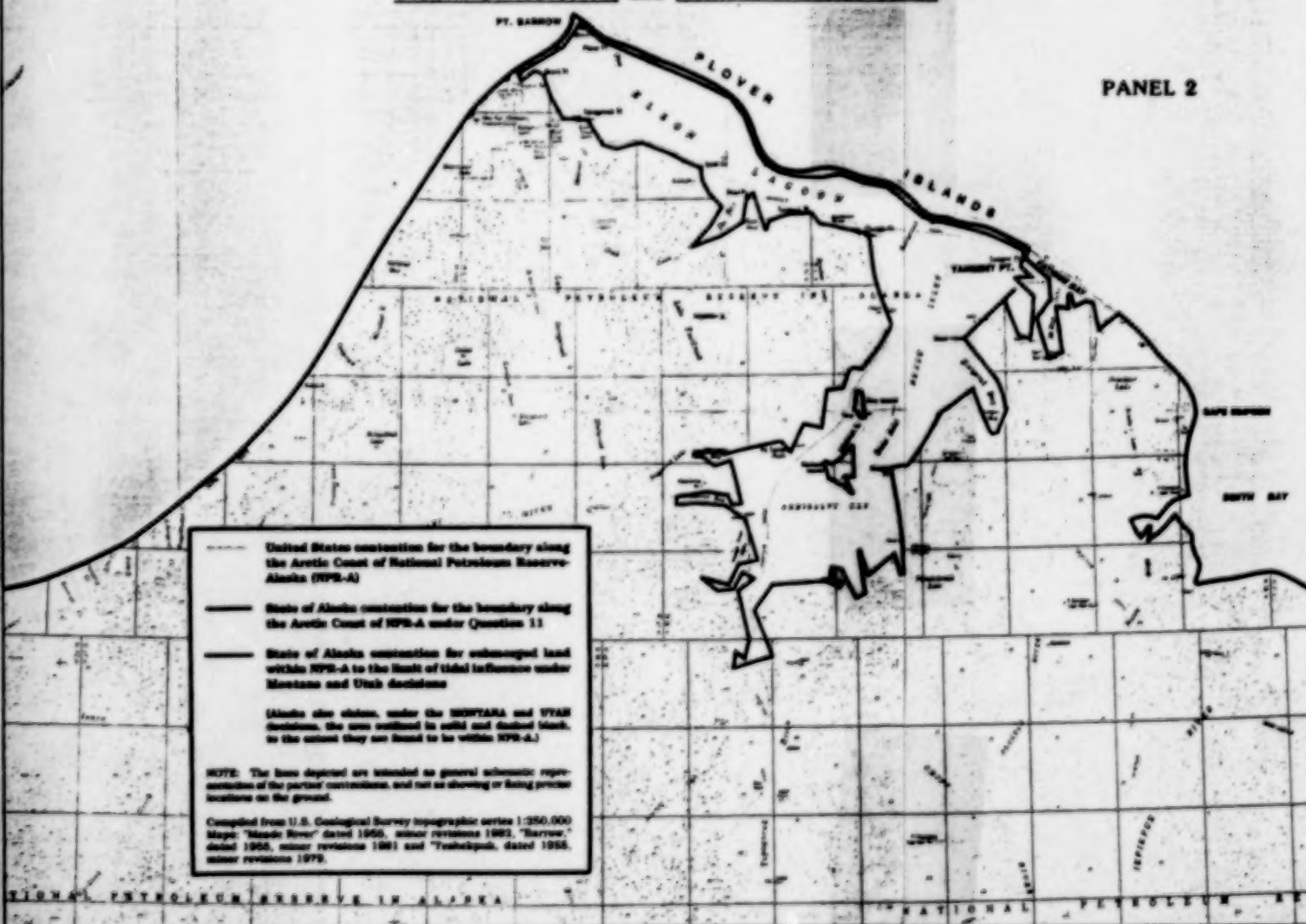


Figure 8.2

Parties' contentions regarding Questions 7, 8 and 11, and regarding the effect of
Utah v. United States and Montana v. United States.

PANEL 3

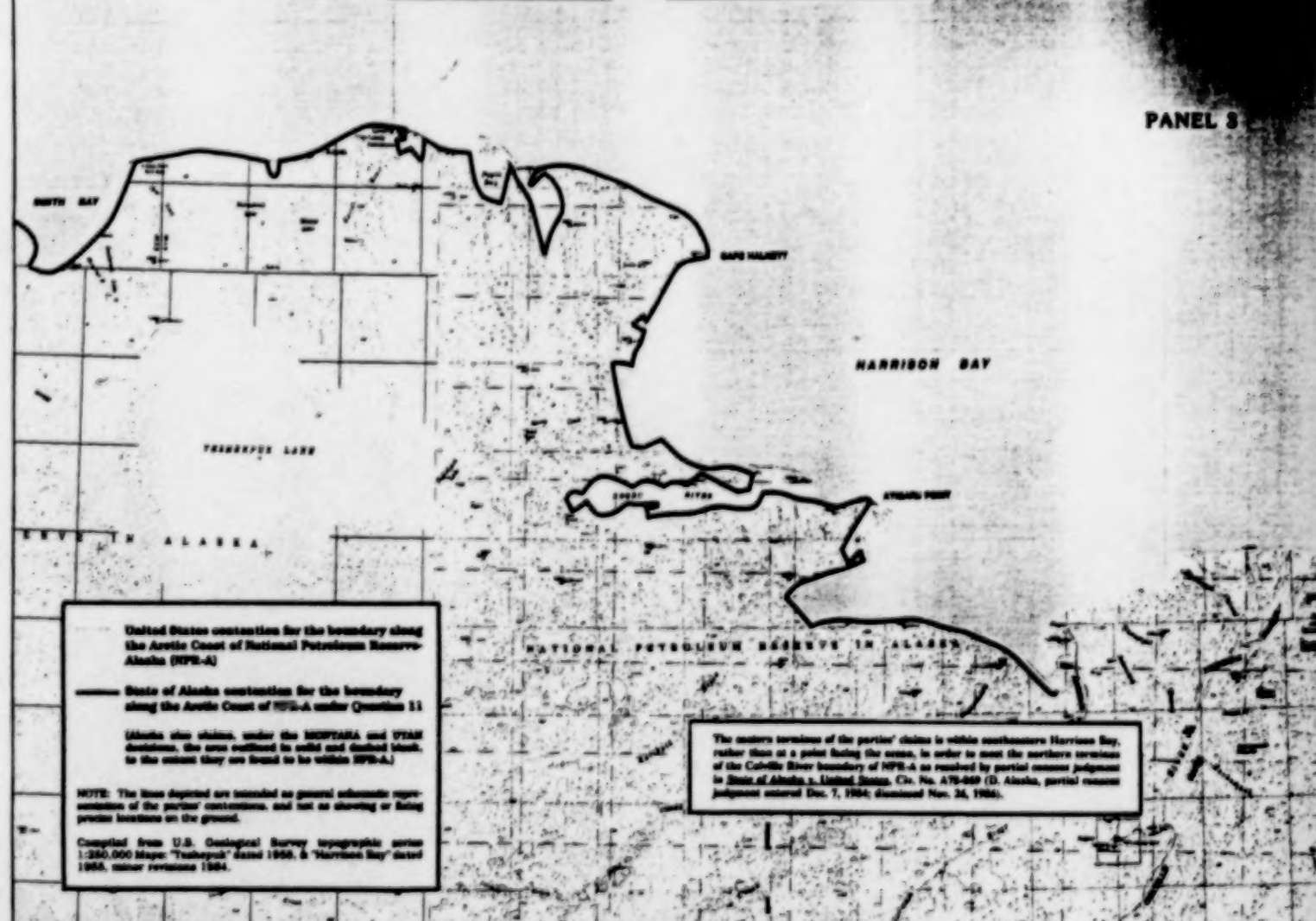


Figure 8.3

BEST AVAILABLE COPY

A. Question 7: Harrison Bay and Smith Bay

Question 7 asks:

Are Harrison Bay and Smith Bay part of National Petroleum Reserve-Alaska?

The parties agree that, if Harrison and Smith Bays are not part of the Reserve, the lands beneath the inland waters of these bays passed to Alaska in 1959, at its statehood, under the Submerged Lands Act.

Question 7 arises because, in 1972, the Department of the Navy issued a notice purporting to delineate the seaward boundary of the Reserve and to place Harrison Bay and Smith Bay inside the boundary. Notice of Boundary Description of Naval Petroleum Reserve No. 4, 37 Fed. Reg. 10,088 (May 19, 1972) (Ak. Ex. 90). *See also* U.S. Exs. 87-91 (maps depicting the 1972 boundary).⁶

⁶ The need for a precise definition of the northern boundary of the Reserve was recognized in 1969. *See* Ak. Ex. 87, a letter of July 1969 from the Navy to the Bureau of Land Management, which states in part:

The northern sea and shore boundaries of Naval Petroleum Reserve No. 4, Alaska have never been delineated on nautical charts since its establishment in 1923.

Due to the increasing tempo of oil and gas activities on the North Slope of Beaufort Sea, it is necessary that the north boundary of Naval Petroleum Reserve No. 4 be marked on the pertinent nautical charts.

... It appears that we have a common interest in the location of this boundary because of the possibility of the existence of unreserved public lands north of Petroleum Reserve No. 4. ...

... We ... would appreciate it if you would undertake to lay down the boundary on nautical charts as the line is described in Executive Order No. 3797A.

In October 1969, the Navy entered into a contract with the Arctic Institute of North America, authorizing the Institute to conduct a study of boundary and land-status problems of the Reserve. Ak. Ex. 102, *infra*, at 1. The report was submitted in 1971. Stewart French & John C. Reed,

The parties agree that the 1972 Notice is ineffective to defeat rights acquired by Alaska in 1959 and that the 1923 Executive Order contains the controlling description. Joint Statement 17. Except at the Plover Islands, the Order expressly encompasses offshore areas only if they are "small lagoons" shoreward of "sandspits and islands forming the barrier reefs" and if these reefs are not more than three miles offshore.

I agree with the parties that the Order does not encompass Harrison Bay or Smith Bay. It is apparent from the maps that the language quoted does not include them, *see* figure 1.1, and the Order provides no other basis for their inclusion. The same conclusion is supported by testimony of Dr. Robert Smith, a geographer in the Department of State and an expert witness for the United States. Dr. Smith noted the geographical differences between Harrison and Smith Bays, where there are no barrier reefs, and Peard Bay, which the United States contends in question 8 is inside the boundary because of its barrier formations. Tr. 203-04, 249. Dr. Smith's opinion was that Smith Bay and Harrison Bay are not in the Reserve. Tr. 223, 237.

The parties have asked for a recommended decree con-

Boundaries and Status of Naval Petroleum Reserve No. 4 (Arctic Inst. of N. Am., July 1971) (Ak. Ex. 102); *id.* (rev. & expanded Sept. 1971) (Ak. Ex. 103). French and Reed viewed the problem of fixing the Reserve's seaward boundary as similar to the problem of fixing a state's coastline for the purpose of the Submerged Lands Act of 1953. They suggested drawing the boundary across bays from headland to headland on the basis of their reading of the Court's Submerged Lands Act decisions, particularly *United States v. California*, 381 U.S. 139 (1965), and *United States v. Louisiana (Louisiana Boundary Case)*, 394 U.S. 11 (1969). Ak. Ex. 103 at 25-28, 44-45, 82. The Navy's own Notice of Boundary Description, however, purported to rely only on the 1923 Executive Order as justifying the inclusion of Harrison and Smith Bays in the Reserve. 37 Fed. Reg. at 10,089 n.5.

firming Alaska's title to the submerged lands underlying Harrison Bay and Smith Bay. They note that Alaska is entitled to security of title, that the United States at one time claimed these areas, and that the Navy Department's boundary description notice has never been withdrawn. Joint Statement 17.

I see no objection to making such a recommendation, subject to two points noted below. The Court has often entered decrees defining offshore boundaries which, in whole or in part, were uncontested. *E.g.*, *United States v. Maine (Massachusetts Boundary Case)*, 452 U.S. 429 (1981); *United States v. California*, 432 U.S. 40 (1977); *United States v. Florida*, 425 U.S. 791 (1976).⁷

The extent of Alaska's rights in Smith and Harrison Bays depends on two further questions. First, the exact boundary of the Reserve inside of the bays is at issue in question 11 (*infra*, section C). Second, the rights of the parties also depend on the seaward limits of Smith and Harrison Bays. Although the parties have agreed on the seaward limits of Smith and north Harrison Bays,⁸ the seaward limit of south-

⁷ A possible justification for such action may be that no officer of the United States can make a permanently binding agreement as to offshore submerged land boundaries. *Cf.* section 7 of the Outer Continental Shelf Lands Act, 43 U.S.C. § 1336 (1988), authorizing interim agreements.

To be sure, the Court will not enter every decree the parties jointly propose. Compare *Vermont v. New York*, 417 U.S. 270, 277 (1974) (denying consent decree proposing an "arbitral" solution) with *New Hampshire v. Maine*, 426 U.S. 363 (1976) (approving consent decree as consistent with the Court's judicial function). Accordingly, the Master has independently reviewed the position with respect to Harrison and Smith Bays.

⁸ For Smith Bay, the agreed limit (approximately Cape Simpson to Drew Point) is defined by the closing line shown on the most current NOS Chart No. 16067. For the northern portion of Harrison Bay, the agreed limit (approximately Cape Halkett to Atigaru Point) is defined by the closing line on the most current NOS Charts Nos. 16064 and 16065.

ern Harrison Bay is the subject of a recommendation in question 15 (*supra*, section IV). The proposition at stake in question 7, however, is only that the Reserve boundary does not include the seaward limits of Smith and Harrison Bays. Questions 11 and 15 have no bearing on that proposition.

I therefore find, in the sense just stated, that Harrison Bay and Smith Bay are not part of the National Petroleum Reserve-Alaska and recommend that the Court answer question 7 in the negative.

B. Question 8: Peard Bay

Question 8 asks:

Is Peard Bay part of National Petroleum Reserve-Alaska?

The geography of Peard Bay is shown in figure 8.4 and in NOS Chart 16084, "Peard Bay and Approaches" (Joint Ex. j, U.S. Ex. 72).

The relevant part of the boundary description in the Executive Order, *supra* note 1, reads as follows:

The coast line to be followed shall be that of the ocean side of the sandspits and islands forming the barrier reefs and extending across small lagoons from point to point, where such barrier reefs are not over three miles off shore

....

Thus, the bay will be inside the Reserve if it qualifies as a small lagoon with appropriate barrier reefs. In Alaska's view, the description is ambiguous with respect to Peard Bay, and the drafters' intentions may therefore be illuminated with other evidence. Tr. 2486. Toward this end it has introduced numerous maps. In the United States' view, the boundary language is self-sufficient, and in any event Alaska's maps are not persuasive evidence of the drafters' intentions. I begin with the weight to be given to the maps.

1. *The early maps*

The Executive Order itself refers to two United States Geological Survey plates, one of an inland region and one of part of Alaska's north coast. The latter map is in evidence as United States Exhibit 63. Dated 1918, it of course does not show the proposed Reserve boundary. Neither does it show Peard Bay; its coverage begins east of Peard Bay near Point Barrow and the Plover Islands. The map does show many areas as unsurveyed.

Alaska refers to several other maps that predate the Executive Order and show Peard Bay. These include its Exhibit 2 (exploratory voyages, 1873-1889), Exhibit 3 (Hydrographic Office, 1882), Exhibit 6 (Alaska Road Commission, 1913), Exhibit 7 (Department of the Interior, 1917), and United States Exhibit 64 (Hydrographic Office, 1922). All these maps differ from current NOS Chart 16084 in whether and how they show the features, such as islands and sandspits, that bear on whether Peard Bay is a lagoon. Alaska sums up the situation as follows:

[E]arly maps of Alaska's north coast show[] that the islands seaward of Peard Bay generally were not depicted as long slender barrier islands enclosing the water body. Instead, they were depicted as round islands substantially seaward of the coast line, making it reasonable that the boundary as described was not intended to follow their seaward edge to enclose "small lagoons."

ASB 25. Alaska concludes that Peard Bay is excluded from the Reserve because the drafters of the Executive Order, using the maps then available, would not have considered it a lagoon.

The United States replies that it is not known what maps, other than those cited in the Order, the drafters may have used and that some of the early maps are consistent with finding Peard Bay a lagoon. In particular it cites two of

Alaska's own exhibits, Ak. Ex. 4 (U.S. Army, ca. 1883) and Ak. Ex. 5 (Department of the Interior, 1906). The United States adds that the drafters "did not appear to have available a clear definition of the coastline." USRB 19.

I follow generally the view suggested by the United States. It is clear that all these maps were prepared at a time when the actual geography was not well known. They are inconsistent not only with current NOS Chart 16084 but also with each other.⁹ The framers of the Executive Order probably understood the limitations of their geographic knowledge. They can hardly have meant for later interpretation of the Order to rest on an attempt to reconstruct their own partial and conflicting information, even after fuller knowledge became available. I conclude that the boundary language of the Executive Order should be interpreted on the basis of current geographical information.

Alaska has introduced other exhibits, however, that show not only beliefs about the geography but also a seaward boundary for the Reserve. The boundary description in the Executive Order was drawn from a letter from the Director of the Bureau of Mines to the Secretary of the Interior, dated February 7, 1923. Ak. Ex. 82.¹⁰ The letter began, "I would respectfully suggest for your consideration the creation by executive order of Naval Petroleum Reserve No. 4, as shown on the accompanying map and to be defined as follows." The map referred to was later lost.

⁹ The parties do not suggest that the coastline has itself changed over the years.

¹⁰ This is one of two known contemporary government letters supporting the creation of the Reserve. The other was written by Acting Secretary of the Navy Theodore Roosevelt (the son of the President). Ak. Ex. 83. See John C. Reed & Stewart French, *Boundaries, and Status of Land and Resources, of Naval Petroleum Reserve No. 4*, at 21-23 (Arctic Inst. of N. Am., rev. & expanded Mar. 1975) (Ak. Ex. 105). The two letters are also treated in section E(4)(b), *infra*.

Alaska has presented a map which it says may be the map referred to in the 1923 letter. Ak. Ex. 144; Ak. Ex. 145 (an enlargement of Ak. Ex. 144). The map misstates the geography of Peard Bay, but it clearly excludes the bay from the proposed Reserve boundary. Alaska contends that the map resolves "any remaining question whether the drafters of Executive Order 3797-A . . . intended Peard Bay and Wainwright Inlet to be included within [the Reserve's] exterior boundaries." ASB 23.¹¹

The map was transmitted to Alaska by Charles Hardee of the Department of the Interior. His cover letter of May 1977 called it "a map which we believe to be the elusive '1923' map. We are attempting to verify it at this time." Ak. Ex. 143. In fact the map was never verified, U.S. Exs. 94, 95, and Alaska acknowledges that "we do not know who drew the line on the map nor when it was drawn." ASRB 23.

These doubts diminish the weight of the map and the seaward boundary it shows. But even if the map had been verified as the map mentioned in the Bureau of Mines' letter, I do not believe it would be dispositive.¹² First, it is plainly not one of the two maps named in the boundary description itself. Had there been a definite intention as to how the boundary description would apply to Peard Bay and other features not named in the description, the drafters could have referred to a boundary map as well as the other plates. Second, the underlying map, like other early maps, omits some of the features of Peard Bay. The line showing Peard Bay as

¹¹ Wainwright Inlet is at issue in question 11, *infra* section C.

¹² I therefore do not reach Alaska's argument that any doubt about the authenticity of Exhibits 144 and 145 should be resolved in its favor.

Alaska also asserts that the United States has "characterized the map attached to [the] letter as the 'best evidence' on this question." ASRB 23-24, citing USRB 19. Careful reading of the United States' brief makes clear, however, that its reference was to the map referred to in the Order itself, not to the map referred to in the Director's letter.

outside the Reserve may have rested simply on mistaken beliefs about the geography. Indeed, the cover letter from the Bureau of Mines describes the entire area to be withdrawn as "largely unknown and unexplored." Ak. Ex. 82, at 2.

Alaska also relies on several editions of maps accompanying the annual reports of the territorial governors of Alaska, published in the years just after creation of the Reserve. Ak. Ex. 1. The maps for 1923 through 1931 show the Reserve boundary and place Peard Bay outside it. Alaska suggests the governors' maps deserve great weight as contemporaneous interpretations by the Federal Government. The United States replies that the governor was not authorized to determine boundaries, that the boundaries shown in different editions are conflicting, and that the maps are geographically inaccurate. It also points to Navy memoranda indicating that no determination of the seaward boundary was made until 1972 and to Interior Department maps omitting the seaward boundary. *See supra* note 6 and accompanying text.

The points made by the United States appear to be correct.¹³ The governors' maps must therefore be taken to express only unofficial opinions. Furthermore, there are discrepancies in their treatment of features other than Peard Bay. For example, the maps for 1923 through 1925 exclude

¹³ A contrary inference might be drawn from U.S. Ex. 71, which is a chart captioned "Major differences of Arctic Ocean boundary of Naval Petroleum Reserve No. 4 as between Department of the Navy F.R. description of May 19, 1972 and BLM's interpretation of E.O. No. 3797-A of February 27, 1931." The caption suggests that the Bureau of Land Management made a boundary determination in 1931. I believe, however, that the phrase "of February 27, 1931" was meant to refer to the date of the Executive Order and should have read "of February 27, 1923." The Bureau of Land Management was not created until 1946, Reorg. Plan No. 3, § 403, 3 C.F.R. 193, 196 (Supp. 1946), reprinted in 5 U.S.C. app. at 1451, 1452 (1994), and there is no evidence in the record of a 1931 boundary interpretation by its predecessor, the General Land Office.

Elson Lagoon and Dease Inlet from the Reserve even though this area, lying behind the Plover Islands, is specifically included by the Executive Order. Such errors do not inspire confidence in the preparers' opinions.

I conclude that the Reserve boundary at Peard Bay should be determined using only the language of the Executive Order and the most recent charts.

2. *The boundary description*

The Order describes the Reserve boundary as following "the ocean side of the sandspits and islands forming the barrier reefs and extending across small lagoons from point to point, where such barrier reefs are not over three miles off shore." Peard Bay will be included in the Reserve if (1) it is a "small lagoon" with "sandspits and islands forming the barrier reefs" extending across it and (2) the "barrier reefs are not over three miles off shore." The three-mile requirement will be treated first.

a. *The three-mile requirement*

Peard Bay is formed by long sandspits at each side of the bay and two sets of islands in its mouth. *See figure 8.4.* It is clear that the sandspits and islands qualify as barrier reefs and that the sandspits, being attached to the mainland, are "not over three miles off shore." Tr. 204, 208-09, 228, 277-78. The question is how the distance to the islands is to be measured.

There are different ways of interpreting the three-mile requirement. Perhaps the most obvious would be to assume that any barrier reefs will run roughly parallel to the mainland and to require that the body of water they enclose be less than three miles across. Lagoons would thus include only narrow bodies of water such as Kasegaluk Lagoon near Icy Cape (figs. 1.1, 8.1). Such a picture is not appropriate to

Peard Bay, however, since the sandspits are attached to the mainland and swing out from it.

Off the western sandspit, which ends at Point Franklin, lie the Seahorse Islands. From Point Franklin to the first of the Seahorse Islands the distance is less than one mile. The entire group is within a three-mile radius of Point Franklin, except for the southernmost part of the southernmost island. *Cf.* Tr. 229-30. Off the eastern sandspit, there is an unnamed set of small islands at a distance of about 0.1 mile. Between the Seahorse Islands and the unnamed islands, the shortest crossing is about 3.25 miles.¹⁴

The United States' expert witness, measuring from each sandspit to the nearest islands, characterized each set of islands as within three miles of the mainland, and he concluded that the three-mile requirement was therefore satisfied. Tr. 209, 229-32. In the United States' view, the seaward boundary of the Reserve thus includes a closing line from Point Franklin to the nearest point on the Seahorse Islands and another closing line from the southeastern tip of the Seahorse Islands to the northwestern tip of the small island group just off the eastern sandspit. Tr. 221-23; Joint Ex. j.

In Alaska's view, the boundary of the Reserve follows the sinuosities of the coast around and inside of Peard Bay, leaving the waters of the bay and the barrier islands outside the Reserve. Tr. 244-45, 264, 267-71. In support of this position Alaska originally contended that, for the barrier islands to be "not over three miles off shore," they must be not over three miles from the "bottom" of the bay, that is, from the

¹⁴ These distances are based on measurements from NOS Chart 16084 (Joint Ex. j). Although there is a suggestion in the transcript that the distance between the two island groups is less than three miles, Tr. 230, the suggestion appears to be incorrect. *See also* Tr. 2440.

landward side of the bay or the part of the bay farthest from the entrance. Joint Statement 18; Tr. 243-44.

Alaska no longer holds this theory. During the hearing, counsel for Alaska stated, "[W]e in effect have abandoned the theory that the barrier islands must at all points be [no] more than three miles from the shoreline." Tr. 244; *see also* Tr. 2485. The intended statement was probably "[no] more than three miles from the shoreline [at the bottom of the bay]."

In its post-hearing brief Alaska summarized the testimony of its witness, Mr. Claud Hoffman, an expert in surveying and cartography. Mr. Hoffman "did not believe he could connect the tip of the sandspit at the eastern edge of Peard Bay with the southeastern end of the Seahorse Islands because that distance exceeds three miles" AB 30-31, citing Tr. 264-65; *see also* Tr. 288, 2482-85. The reasoning behind this point is unclear. One interpretation would be that water crossings between barrier features should not exceed three miles.¹⁵ But the Executive Order speaks to the distance of barrier formations offshore, not to the distance between them. A water crossing of more than three miles between islands is relevant not to their distance offshore but to whether Peard Bay is enough cut off from the sea to be a lagoon. That question is discussed in the next section.

Another interpretation of Alaska's point would be that the southeastern end of the Seahorse Islands is more than three miles not only from the eastern sandspit but also from any other part of the mainland. The great bulk of the area of the Seahorse Islands, however, and the whole of the small east-

¹⁵ In fact the United States' proposed boundary runs from the southeastern end of the Seahorse Islands to the islands adjacent to the eastern sandspit, not to the sandspit itself, but that distance also exceeds three miles.

ern islands, are within a three-mile radius of their respective arms of the mainland. From Point Franklin to the nearest point on the southernmost of the Seahorse Islands, the distance is about 2.75 miles; from Point Franklin to the farthest point on that island is less than 3.2 miles. In light of the inevitable irregularities of natural geographic features, I do not believe the drafters of the Order would have meant a part of a single barrier island beyond three miles to disqualify a lagoon from inclusion inside the Reserve boundary.¹⁶ Accordingly, I find that the islands in the mouth of Peard Bay meet the test of being "not over three miles off shore."

b. Peard Bay as a small lagoon

Several points have been raised as to whether Peard Bay is a "small lagoon": (1) the size of the body; (2) whether it is sufficiently separated from the sea to be considered a lagoon; and (3) the fact that it is called a bay rather than a lagoon.

There is no contention that Peard Bay is too large to be a small lagoon. Peard Bay itself comprises about 93 square miles. By way of comparison, the United States introduced evidence of the size of other lagoons. Tr. 204-206. In the Pacific, Kwajalein Lagoon is over 800 square miles in area, and Bikini Lagoon is over 200 square miles. On the Texas Gulf Coast, the Laguna Madre measures over 425 square

¹⁶ Compare George W. Skadel, *The Coastal Boundaries of Naval Petroleum Reserve No. 4*, at 15 (University of Alaska Sea Grant Program, Alaska Sea Grant Rep. No. 73-12, 1974) (Ak. Ex. 10). Skadel points out that at Kasegaluk Lagoon some parts of the reef are over three miles offshore, and he suggests that ownership is divided between Alaska and the United States. In his view the Reserve boundary runs outside the barrier islands where the lagoon is less than three miles wide but returns to the mainland where the lagoon is wider. This interpretation seems clearly untenable, for it could result in dividing lagoon beds into arbitrarily small slices, depending on the particular configuration of the barrier reefs. Even Alaska has not adopted Skadel's position on this point.

miles. In the Arctic, Elson Lagoon (which is behind the Plover Islands and so is specifically provided for in the Executive Order) is 120 square miles. Kasegaluk Lagoon, which is divided by the western boundary of the Reserve, totals 325 square miles, 85 square miles of which lie within the Reserve boundary. Tr. 206, 247-48, 250-51. On the basis of these measurements, the United States' expert witness concluded that, in the context of the Executive Order, Peard Bay could be characterized as a small lagoon. Tr. 207. Alaska does not dispute that it is small.

A contested issue is whether Peard Bay is adequately separated from the ocean to be a lagoon. The United States' witness, Dr. Smith, described a lagoon as "a body of water that is wholly or partially separated from the open sea by a narrow spit or spits of land, barrier islands." Tr. 204. He also testified that the barrier reef between a lagoon and the open sea could be submerged as much as 15 meters. Tr. 208. Alaska offered a definition of "lagoon" as "a body of water cut off from a larger body of water by a barrier beach or reef." Donald J. Orth, *Dictionary of Alaska Place Names* viii (U.S. Geological Survey Professional Paper 567, rev. 1971) (Ak. Ex. 75); Tr. 227-28, 265-66. Alaska's witness, Mr. Hoffman, testified that Peard Bay "would fit within the general definition of a lagoon" but that it has not "had an enclosure by a barrier reef." Tr. 266. He agreed, however, that barrier reefs could be submerged. Tr. 277.

Besides the sandspits and islands that partially enclose Peard Bay, there are additional areas that Dr. Smith testified formed part of the barrier reef. Between Point Franklin and the Seahorse Islands, the water is generally less than six feet deep, and part of the area is marked "shoal" on Chart 16084 (Joint Ex. j). At the east side of the bay, the sandspit and small islands beyond it are extended for nearly 1.5 miles by a narrow strip of sand that the chart indicates is submerged by one foot of water or less. Taking these areas into ac-

count, Dr. Smith concluded that seventy to eighty percent of the entrance to Peard Bay was encompassed by barrier reefs. Tr. 208-09.

Alaska contends that submerged areas may not be considered part of the enclosure of a lagoon because "the language of the Executive order specifically provides that only 'the sandspits and islands forming the barrier reefs' are to be considered." ARB 27. This argument is unconvincing. The Executive Order does speak of the "sandspits and islands forming the barrier reefs" in defining the coastline to be followed, but it does not define the term "lagoon," and it does not say that only sandspits and islands can contribute to the formation of a lagoon. Given the testimony of both witnesses that barrier formations can be submerged, I conclude that the submerged shoals may be considered.

The remaining stretches of water at the entrance to Peard Bay include two narrow channels. Between Point Franklin and the Seahorse Islands the channel has depths ranging from 7 to 13 feet. The other channel, just southeast of the Seahorse Islands, has depths from 15 to 39 feet. See Tr. 229, 266, 278-79; Joint Ex. j.¹⁷ The rest of the distance from the Seahorse Islands to the finger of barely submerged sand, about 1.7 miles, has depths of less than 12 feet.¹⁸

Alaska argues that, because of the channels, Peard Bay is not cut off from the ocean and therefore does not satisfy the definition of a lagoon in the *Dictionary of Alaska Place Names*. Channels are common features of many lagoons, however, and Alaska's witness himself did not distinguish

¹⁷ The *Coast Pilot*, published to supplement NOS charts, states that the first channel has a least depth of about four feet and that a depth of about twelve feet can be carried through the second channel. National Ocean Survey, U.S. Dep't of Commerce, 9 *United States Coast Pilot* 342 (9th ed. 1979) (Ak. Ex. 136).

¹⁸ The *Coast Pilot*, *supra* note 17, at 342, states that a depth of about eight feet can be carried into much of this area.

between the channels at Peard Bay and those at other lagoons. At Kasegaluk Lagoon, which he agreed was inside the Reserve boundary as a small lagoon, he identified channels at the Pingorarok Pass and Akoliakatat Pass entrances, both with depths comparable to those at Peard Bay. Tr. 279; Ak. Exs. 108, 109 (NOS charts 16086 and 16087).

Alaska's argument also requires too strong a definition of "lagoon." If Peard Bay were entirely cut off from the sea, it would be a lake, not a lagoon. The reference in the Executive Order to islands and sandspits indicates that the drafters certainly envisaged water connections between lagoons and the sea. I thus find that Peard Bay, being seventy to eighty percent enclosed, is adequately cut off from the sea to be a lagoon.

Finally, Alaska argues that Peard Bay should not be considered a lagoon because it is designated a bay rather than a lagoon on charts and in Orth's *Dictionary of Alaska Place Names*. The Executive Order, however, does not draw a contrast between lagoons and bays; it does not speak of bays at all. Although Peard Bay may be a bay for certain purposes, that is not inconsistent with its being a lagoon for the purpose of the Executive Order.

As for the names shown on charts, many features were named by navigators and explorers, not by geographers with precise criteria and precise charts. Peard Bay was named in 1826, long before even the earliest charts discussed above in section B(1). Ernest de K. Leffingwell, *The Canning River Region, Northern Alaska* 71 (U.S. Geological Survey Professional Paper 109, 1919), citing Frederick W. Beechey, *Narrative of the Voyage of the Blossom* (London 1831). The *Dictionary of Alaska Place Names* agrees. Orth, *supra* page 361, at 745. An expert witness for Alaska testified, in another context, that whether a water body is called a bay is entirely ad hoc and of no significance. Tr. 2770 (Harrison Bay).

3. Conclusion

Taking into account the location and nature of the barrier reefs, the size of Peard Bay, and the meaning of "lagoon," I find that the bay is a small lagoon behind appropriate barrier reefs within the meaning of Executive Order 3797-A. I therefore construe the Executive Order as including Peard Bay within the exterior boundary of the Reserve.

C. Question 11: Wainwright Inlet and the Kuk River, Kugrua Bay and River, and other small inlets, bays and river estuaries

Question 11 concerns the boundary of the Reserve at several inlets, bays, and river estuaries:

Are the submerged lands within Wainwright Inlet and the Kuk River, Kugrua Bay and River, and other small inlets, bays and river estuaries, between Icy Cape and Point Barrow and between Point Tangent and the Colville River, within the boundary of the National Petroleum Reserve—Alaska?

The positions of the parties on question 11 are shown in figures 8.1, 8.2, and 8.3 (facing page 348); the inlets named in the question all appear in figure 8.1. The stretch between Point Barrow and Point Tangent (figure 8.2) is not disputed in question 11 since that is the Plover Islands area, for which the Executive Order makes special provision.

Alaska argues that, except between Point Barrow and Point Tangent and where near-shore barrier reefs create small lagoons, the boundary of the Reserve follows the sinuities of the shore, going into bays, inlets, and river estuaries along the line of mean higher high water. Supplement to Joint Statement at 4. The United States says that the boundary follows the coastline of the Arctic Ocean and includes at least short water crossings across river mouths and

narrow-mouthed bays and inlets. *Id.* at 3. The United States' position on question 11 is in accord with the Navy's 1972 Notice of Boundary Description, *supra* page 349, except for the boundary at Smith and Harrison Bays. Tr. 223. Its position is also shown on United States Exhibits 71 (Smith and Harrison Bays) and 87–91 (all other areas).

1. The geography

The main areas in dispute are those named in question 11. Some additional areas are shown in figures 8.1 through 8.3. Still others within the scope of the arguments are too small for illustration.

The first areas mentioned in question 11 are Wainwright Inlet and the Kuk River, which drains into the inlet (figure 8.1).¹⁹ Together these constitute a long deep indentation, stretching at least thirty miles into the mainland, with a width of as much as four miles. The inlet is less than 0.2 mile wide at its mouth. *See* Tr. 279–80; Joint Exs. d, k; U.S. Ex. 84 at 11; U.S. Ex. 87; Ak. Ex. 136 at 341–42.

Also listed in the question are the Kugrua Bay and River (figure 8.1). Kugrua Bay is a formation of about four miles by eight miles, joined to Peard Bay by an opening of about 0.8 miles. *See* Joint Exs. d, j. On the basis of my finding in question 8 that Peard Bay is a small lagoon, Kugrua Bay and River are no longer at issue. The Reserve boundary runs outside of Peard Bay and therefore outside of Kugrua Bay and River as well.²⁰

Of the smaller areas where the boundary is disputed, the

¹⁹ On NOS Chart 16085 (Joint Ex. k), the first body of water is called Wainwright Lagoon and the name "Wainwright Inlet" refers to the opening into it.

²⁰ Should the Court disagree with my recommendation on Peard Bay, it would then become necessary to consider the United States' further contention that Kugrua Bay is a small lagoon in its own right.

largest is the Kogru River at Harrison Bay. This water body is about one to two miles wide and ten miles long, with an opening into the bay that is less than a mile wide. The opening is partially screened by the Eskimo Islands. See figure 8.3; Joint Ex. c; Ak. Ex. 85-920K (NOS Chart 16064); U.S. Ex. 88; Ak. Ex. 136 at 344.²¹

The figures show several other large areas as disputed, including Kasegaluk Lagoon and the Elson Lagoon-Dease Inlet-Admiralty Bay complex. Both of these are conceded to lie within the exterior boundary of the Reserve. For Kasegaluk Lagoon, Alaska's witness so drew the boundary. Tr. 274-75, 279. For Elson Lagoon, between Point Barrow and Point Tangent, the wording of question 11 excludes any dispute over the boundary. The remaining issue for these areas is the import of *Montana* and *Utah*. That issue will be discussed in section E for all the lands under tidal waters that are found to be within the Reserve boundary. As in the analysis of Peard Bay, I concentrate here on the location of the boundary.

2. Alaska's maps

The boundary of the Reserve at the disputed inlets has been argued primarily in terms of the language of the Executive Order. Alaska has also relied in part on some of the same maps considered in connection with Peard Bay.

Alaska's Exhibits 144 and 145, discussed *supra* in section B(1), are copies of a map showing a seaward boundary for the Reserve. It has been suggested but not verified that the map accompanied a draft of the boundary description, whose

²¹ Despite its name, the Kogru River is not a river. The *Coast Pilot*, *supra* note 17, at 344, describes it as "a series of connected lakes that form a 10-mile long lagoon that empties into Harrison Bay." See also section IV, *supra*, at note 66.

language was incorporated verbatim in the Executive Order. See *supra* page 355. The map does show at least part of Wainwright Inlet as outside the Reserve boundary.

Alaska's Exhibit 1, also discussed in section B(1), consists of maps accompanying the annual reports of the territorial governors of Alaska. These maps begin with the 1923 edition and run forward into the 1930s. They also show Wainwright Inlet as outside the Reserve.

For largely the same reasons that I found these maps unconvincing with respect to question 8, *supra* pages 355-57, I also find them unconvincing on question 11. With respect to Exhibits 144 and 145, even laying aside doubts of authenticity, there must have been a decision at some level against including a boundary map as part of the Executive Order. There is positive evidence that the drafters knew they did not know the details of the geography. The geography shown in all the maps is inaccurate, and the unofficial governors' maps also treat the Reserve boundary inconsistently over the years.

In addition, all the maps are on a very small scale. For those showing a scale, it is 1:5,000,000 or about 1 inch to 80 miles. As noted earlier, some of the disputed inlets are too small to be clearly illustrated even in figures 8.1 through 8.3, which are based on maps whose scale is 1:250,000. For the larger inlets, the maps fail to support Alaska's position at any disputed areas other than Wainwright Inlet and Peard Bay. At Wainwright Inlet itself, there is no indication that the boundary line continues up the adjacent Kuk River. In the case of Peard Bay, the maps that show the adjacent Kugrua Bay and River at all show them as inside the Reserve.

For the reasons just summarized, the Reserve boundary should be determined on the basis of the Executive Order and not from the maps of the period.

3. Construction of the boundary description

The boundary description in the Executive Order uses two phrases whose relationship is in controversy.²² One is "highest highwater mark"; the other is "coast" or "coast line." The United States argues that the principal reference in the description is to the coast and that the meaning of that term includes short water crossings. Alaska argues that the controlling phrase, for areas like Wainwright Inlet and the Kuk River, is "highest highwater mark."

The first paragraph of the boundary description begins with the inland boundary of the Reserve. It starts at the west with Icy Cape, goes inland, and returns to the coast on the east at the mouth of the Colville River. Specifically, the boundary follows the Colville River downstream along the highest highwater mark of the most western slough, to "the

²² The Order is quoted in full *supra* note 1. The boundary description, repeated here for convenience, is as follows:

Commencing at the most northwestern extremity of the point of land shown on the maps of Alaska as Icy Cape, . . . [thence south, thence east, thence north] to a point at the highest high water on the western or right bank of the Colville River; thence following said highest highwater mark downstream along said Colville River and the western bank of the most western slough at its mouth to the highest highwater mark on the Arctic coast. From here, following the highest highwater mark westward to the point of beginning.

The coast line to be followed shall be that of the ocean side of the sandspits and islands forming the barrier reefs and extending across small lagoons from point to point, where such barrier reefs are not over three miles off shore, except in the case of Plover Islands, from Point Tangent to Point Barrow (Pl. 3, U.S.G.S., P.P. 109), long. approximately 154° 50', where it shall be the highest highwater mark on the outer shore of the islands forming the groups and extending between the most adjacent points of these islands and the sandspits at either end. In cases where the barrier reef is over three miles off shore the boundary shall be the highest highwater mark of the coast of the mainland.

highest high watermark on the Arctic coast." The first paragraph concludes: "From here, following the highest highwater mark westward to the point of beginning."

The second paragraph describes the "coast line to be followed" in certain specific cases. For the first two cases—small lagoons with barrier reefs less than three miles offshore, and the Plover Islands—the boundary runs along the outer side of the barriers. For the third case—"where the barrier reef is over three miles off shore"—the boundary is defined as "the highest highwater mark of the coast of the mainland."

In Alaska's view, AB 72, the areas disputed in question 11 are all areas where there are no offshore islands and, as a consequence, only the first paragraph of the boundary description applies. The United States, on the other hand, takes the last case mentioned in the second paragraph to cover all instances not otherwise provided for.

I agree with Alaska that the second paragraph of the boundary description is silent as to cases where no barrier reef exists. Nevertheless, it seems most unlikely that the drafters intended to treat the absence of a barrier differently from the presence of a barrier more than three miles offshore. The language used for the two situations, respectively "the highest highwater mark" (in the first paragraph) and "the highest highwater mark of the coast of the mainland" (in the second paragraph) therefore appear to be alternate expressions for the same intention.

Alaska argues, however, that the language of the second paragraph should be disregarded. Its theory is that the first paragraph gives a metes and bounds description, which calls for following the highest high water mark and makes no reference to water crossings. According to Alaska, this description is not to be varied by the second paragraph except in the particular cases there enumerated. It cites *Prentice v. Northern Pacific Railroad*, 154 U.S. 163 (1894), for the rule that

"[w]here there is a specific description by metes and bounds, other words which might generally describe the same land do not vary the specific description set out." AB 75. Alaska also takes comfort from the fact that Dr. Smith, the United States' witness, testified:

[I]f this whole area was merely a mainland with river mouths coming to it and the lagoons and bays incorporated within the mainland, probably it [the boundary description] would stop at that earlier paragraph. . . . [I]t was just the offshore features that caused the writers . . . to include that next paragraph.

Tr. 298. The United States responds that the two paragraphs of the boundary description form an integrated whole.

I do not agree with Alaska that the *Prentice* case requires the second paragraph to be disregarded entirely in the case where there are no islands offshore. As the Court in *Prentice* recognized, descriptions of land are to be read "for the purpose of ascertaining the intention of the parties." 154 U.S. at 176. It is generally agreed that specific rules of construction, such as disregarding a general description that conflicts with a metes and bounds description, are subsidiary to the intent. E.g., 6A Richard R. Powell, *The Law of Real Property*, ¶ 899[3] (rev. ed. 1988); 2 Aaron L. Shalowitz, *Shore and Sea Boundaries* 469-70 (U.S. Dep't of Commerce Pub. 10-1, 1964).²³ I conclude that both paragraphs of the boundary description may be considered in seeking its intended meaning.

The question remains whether the presence of the word

²³ Even in *Prentice* the Court did not wholly disregard the general description that plaintiff said covered the land he was suing for. Rather, it found that neither the metes and bounds description nor the general description, on a fair interpretation, described the land in controversy. 154 U.S. at 174, 176. Similarly here, the two paragraphs should be reconciled if possible, not characterized out of hand as conflicting.

"coast" in the second paragraph sheds any further light on the intention. The United States argues that the word should be understood to include short water crossings. Alaska replies that, in light of the very extensive later litigation over the meaning of "coast line" in the Submerged Lands Act, it requires "an incredible stretch of the imagination" to conclude that there was an accepted definition of these terms in 1923. ARB 29-30. The parties agree that the Order, not later practice, is controlling.²⁴

Alaska is undoubtedly correct that the meanings of "coast" and "coastline" were relatively undeveloped at the time the Order was drafted. Even at that time, however, they appear to have had the general sense of land facing on the sea, excluding at least inland areas facing only a river bank. Thus, both the 1910 and the 1933 editions of *Black's Law Dictionary* defined "coast" as the "edge or margin of a country bounding on the sea." *Black's Law Dictionary* 343 (3d ed. 1933); *id.* 210-11 (2d ed. 1910).²⁵ Similarly, the

²⁴ As the meaning of "coast line" has later developed in the context of the Submerged Lands Act, it would include closing lines across the mouths of bays and rivers in accordance with Articles 7 and 13 of the Convention on the Territorial Sea and the Contiguous Zone, done Apr. 29, 1958, 15 U.S.T. 1606, 516 U.N.T.S. 205. *United States v. California*, 381 U.S. 139 (1965).

²⁵ The full definition reads:

COAST. The edge or margin of a country bounding on the sea. It is held that the term includes small islands and reefs naturally connected with the adjacent land, and rising above the surface of the water, although their composition may not be sufficiently firm and stable to admit of their being inhabited or fortified; but not shoals which are perpetually covered by the water. *U.S. v. Pope*, 28 Fed. Cas. 630; *Hamilton v. Menifee*, 11 Tex. 751.

This word is particularly appropriate to the edge of the sea, while "shore" may be used of the margins of inland waters.

Black's Law Dictionary 210-11 (2d ed. 1910).

1916 edition of *Webster's Collegiate Dictionary* contrasted "coast" with "shore," restricting "coast" to "the land along the sea only."²⁶

It is difficult to give "coast" or "coastline," as they are used in the 1923 Order, a sense any more technical than this. It is true that some technical content had developed in an international law context.²⁷ But the 1923 Order, designed merely to set some federal lands apart from other federal lands, would not have been thought to have international implications. Therefore, I believe that interpretation of the Order should rest not on an a priori definition of "coast" but on what the drafters would have meant to include in the Reserve given their language, their purposes, and the particular geography.

4. Application of the boundary description

a. Wainwright Inlet

The most detailed map of Wainwright Inlet (or Wainwright Lagoon, as it is called in NOS publications) is NOS Chart 16085 (Joint Ex. k). See also figure 8.1. The mouth of the inlet, as already stated, is less than 0.2 mile wide. From the southwest, the area is partly enclosed by a spit of land ending at Point Marsh. A continuation of this same spit to the south forms part of the enclosure of Kasegaluk Lagoon, which is agreed to be inside the boundary. See NOS Chart 16086 (Ak. Ex. 108). From the northeast, the area is

²⁶ "Shore is the general word for the land adjacent to the sea, a lake, or a large stream; coast denotes the land along the sea only, esp. as a boundary" *Webster's Collegiate Dictionary* (3d ed. 1916) s.v. "shore."

²⁷ For example, a sharp distinction had been made between the physical coastline and the political coastline. See *supra* section III(F)(2)(d), describing the United States' position in the Alaska boundary arbitration of 1903.

partly enclosed by a peninsula running southwest from the village of Wainwright. At the end of the peninsula is an island, whose tip is Point Collie. The island is entirely landward of the spit ending at Point Marsh. Landward of both Point Marsh and the island, there is a very narrow spit attached to the peninsula and extending south of Point Marsh by about 1.4 miles. The formations enclosing the area thus include two sandspits and one island.

The United States suggests that Wainwright Inlet is a small lagoon in the sense of the second paragraph of the boundary description. Its expert witness, Dr. Smith, testified that Wainwright Inlet is the extended mouth of the Kuk River and that he would treat it as a river closing. Tr. 294, 296-97. Alaska's expert witness, Mr. Hoffman, testified that the inlet failed to qualify as a lagoon under the second paragraph because of a channel into it. Tr. 272, 289. I have rejected a similar argument as to the effect of channels at Peard Bay, *supra* section B(2)(b).²⁸ I therefore find that Wainwright Inlet is a small lagoon with barrier reefs, formed by sandspits and islands, less than three miles offshore.

²⁸ The *Coast Pilot*, *supra* note 17, at 341-42, describes the channel and the general area as follows:

Charts 16085, 16005.—Wainwright Inlet (70°36.5' N., 160°06.5' W.), 39 miles ENE of Icy Cape, is the entrance to **Wainwright Lagoon**. The narrow winding channel between **Point Collie** on the E and **Point Marsh** on the W has a controlling depth of 6 feet at normal water level, but passage should not be attempted without the aid of local guides. Shoals extend 0.7 mile off the inlet and are well defined by breakers during moderate weather; during W storms the breakers stretch across the channel. Ice, that may enter the inlet during SW storms, follows the channel, where the current reaches a maximum velocity of about 2 knots. The mean range of tide is only about 0.5 foot.

....
Kuk River, that empties into the head of Wainwright Lagoon, has an even bottom and no definite channel. Depths decrease gradually

b. Other indentations with sandspits and islands

Along the seaward side of the Reserve there are numerous indentations that lack barrier islands but are almost wholly enclosed by spits of land attached to the mainland. Some are visible only on the largest-scale charts.²⁹ If the Reserve boundary goes across the openings to these inlets, it forms a generally smooth, continuous line in their vicinity. Under Alaska's theory, the boundary apparently follows the sinuosities of the shore into each inlet. Had the enclosing spits been separated from the mainland, becoming near-shore barrier islands, Alaska would presumably concede the inlets to be small lagoons inside the boundary.

I do not believe that the drafters could have intended such a distinction between onshore and offshore barrier features, for it would put near-lakes outside the boundary while bringing areas enclosed only by islands inside it. Rather, these inland areas appear to qualify as small lagoons with barrier reefs less than three miles offshore—in fact, not offshore at all. Even at Kasegaluk Lagoon, which is concededly inside the boundary, and at Peard Bay, which I have found to be inside the boundary, the enclosing reefs are formed in considerable part by spits attached to the mainland.

from 10 feet at the lagoon to a reported 4 feet some 30 miles up-river. . . .

²⁹ Some examples, too small to be shown as disputed in the figures, are (1) just west of Cape Halkett, where there is a formation that looks like a lake on the 1:250,000 map (U.S. Ex. 88) but which the large-scale chart shows to be not entirely closed off from the sea (NOS Chart 16065, Ak. Ex. 85-920J, at about 152°21' W.); (2) west of Pogik Bay and just west of Smith River, at the spot marked "lonely aerodrome," where the indentation is described by the *Coast Pilot* as "a large, shallow lagoon that is separated from Beaufort Sea by a narrow sand barrier" (NOS Chart 16066, Ak. Ex. 85-920I, at about 153°14' W.; *Coast Pilot*, *supra* note 17, at 344); and (3) between Cape Simpson and Fatigue Bay in two places (NOS Chart 16067, Ak. Ex. 85-920H, at about 154°35' W. and 154°41' W.).

Several of the disputed inlets do have islands at their mouths. That is true of Kugrua Bay and River, which are adjacent to Peard Bay and which the United States' witness testified form a small lagoon even if Peard Bay does not (Tr. 294-95; fig. 8.1 and NOS Chart 16084, Joint Ex. j); of Fatigue Bay, with McKay Inlet behind it, just east of Elson Lagoon (fig. 8.2 and NOS Chart 16081, Ak. Ex. 106); of Pogik Bay, between Smith Bay and Cape Halkett (fig. 8.3 and NOS Chart 16066, Ak. Ex. 85-920I); of the Kogru River, which is partly screened by the Eskimo Islands (fig. 8.3 and NOS Chart 16064, Ak. Ex. 85-920K); and of an unnamed area in south Harrison Bay, just south of Atigaru Point (fig. 8.3 and NOS Chart 16064, Ak. Ex. 85-920K). Alaska has not explained why it believes these areas fail to qualify as small lagoons within the meaning of the second paragraph of the boundary description. Except for Kugrua Bay and River, Alaska's expert witness testified from a small scale chart (NOS Chart 16003, Joint Ex. b, scale 1:1,587,870) on which the islands appeared tiny or were invisible.

I conclude that many of the disputed indentations, if not all of them, are inside the Reserve boundary as small lagoons with barrier reefs less than three miles offshore.³⁰

³⁰ I have not found that every disputed indentation qualifies for inclusion inside the Reserve boundary. For some areas the parties provided no information beyond that shown in the figures. Some of the disputed areas are too far inland to be shown on the large-scale NOS charts, and it is difficult to determine their nature from the 1:250,000 maps in evidence. Other areas, particularly at south Harrison Bay, are shown on the NOS charts, but from comparison with the smaller scale charts the Master is unable to determine precisely where the United States proposes to draw the boundary line. The Master trusts that, with the guidance of the present discussion, the parties will be able to reach agreement as to those areas.

c. *Tidally influenced parts of rivers*

If the Reserve boundary does not go across the mouth of Wainwright Inlet, there will be a serious question as to how far the boundary extends up the Kuk River. The same question arises for other rivers along the coast of the Reserve, including the Sinararuk, north of Wainwright Inlet (fig. 8.1), and the Ikpihpuk, at Smith Bay (figs. 1.1 and 8.2). Tr. 276-77, 287. These rivers raise the one issue where the use of "coast" in the second paragraph of the boundary description becomes important. See *supra* section C(3).

The United States would draw the Reserve boundary as crossing rivers at their mouths, arguing that river crossings form part of the coastline. Alaska replies that crossing the mouth of a river is a departure from the high-water mark, contrary to the first paragraph of the boundary description. It does not suggest, however, that the boundary goes inland all the way to the source of each river. Its expert witness, Mr. Hoffman, testified that he would follow the high-water line up rivers and would draw the Reserve boundary as crossing rivers at the plane of mean high water:

I would go along the mean highwater again into the river to the mean highwater, being the high-water datum that we are on, go across the river at that datum pla[ne] on that elevation and follow the same datum line along the southerly shore.

Tr. 273-74. See also Tr. 277, 286-87.

This position presents difficulties. First, it becomes impossible to determine the boundary location from charts, although it is clear that the river crossings Mr. Hoffman had in mind might be several miles inland. Cf. Tr. 196; Joint Ex. e; Tr. 169-76 (Arctic National Wildlife Refuge).

Second, the position requires conceptual clarification. Upstream, the high-water mark of a river is a line along its banks, see 2 Shalowitz, *supra* page 370, at 373, but neither

party appears to use "high-water mark" in that sense here.³¹ For the ocean, a datum like high water refers to a plane representing the height reached by the tide, and the corresponding high-water mark refers to the meeting of this plane with the land along the shore. 1 *id.* at 89. The United States, apparently referring to the physical mark left on the shore, says there is a departure from the high-water mark no matter whether the river is crossed at its mouth or farther inland. Tr. 2443-44. Alaska, on the other hand, interprets the high-water mark as the place where the tidal datum plane intersects the river.

Assuming that Alaska's interpretation of "high-water mark" is accepted, there are still difficulties with its meaning. Because river water levels vary, it is not clear how the place of intersection between the tidal datum plane and the river would be determined. Mr. Hoffman, in other parts of his testimony,³² said that he would cross rivers where salt water meets fresh, Tr. 141, 149-50, or at the limit of tidal influence, Tr. 162. The relationship of these tests to the tidal datum plane has not been clearly explained. Neither has the fact that the meeting of salt water with fresh and the limit of tidal influence both vary with the time of year. See Tr. 154-56, 161-64, 170-76, 177-78, 2503. Mr. Hoffman did indicate that the tidal datum plane is meaningful at rivers, and he said that its application at rivers, although a complex task for the surveyor, had "been accomplished on several occasions." Tr. 178; see also Tr. 174-75. However,

³¹ The phrase does occur in the sense of a line along the bank in the description of the inland boundary of the Reserve, which in part follows "said highest highwater mark downstream along said Colville River . . ."

³² Most of Mr. Hoffman's testimony on the treatment of rivers was directed to the boundary of the Arctic National Wildlife Refuge (*infra*, section IX). Although the Petroleum Reserve description uses "highest high water" and the Wildlife Refuge description uses "extreme low water," the same principles are involved in both.

neither the meaning nor the method has been further elaborated.

There is also precedent contrary to Alaska's position. *Knight v. United States Land Ass'n*, 142 U.S. 161 (1891), involved the boundary of the city of San Francisco, which derived from rights acquired by its predecessor, the pueblo of San Francisco, under Mexican law. By a decree of the United States Circuit Court, the land was described as "a tract . . . embracing so much of the extreme upper portion of the peninsula above ordinary high-water mark . . . as will contain an area of four square leagues—said tract being bounded on the north and east by the bay of San Francisco . . ." 142 U.S. at 169. It was disputed whether this description covered land reclaimed from Mission Creek, which at the relevant time had been below high-water mark and emptied into the bay. Two surveys were made to implement the decree. The first (the Stratton survey), which was later set aside by the Secretary of the Interior, "followed the tide line up the creek, and crossing over, ran down on the other side." *Id.* at 171. The second (the Von Leicht survey), upon which a United States patent was issued, crossed Mission Creek at its mouth. *Id.* at 205 (Field, J., concurring). Although the decision turned on other grounds, the Court in dictum approved the method of the second survey, *id.* at 182, and Justice Field, in a concurring opinion, called it "the universal rule governing the measurement of waters," *id.* at 207. See also *id.* at 207–10.

Alaska suggests that its position gains support from *Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988), which dealt with the extent of states' rights in lands under tidally influenced waters in the absence of either a grant by a prior sovereign or any federal action to withhold the lands.³³

³³ The petitioners in *Phillips* did trace their claims to prestatehood Spanish land grants. 484 U.S. at 472. However, the Spanish land grants

The case held that lands under a bayou and certain streams in Mississippi, tidally influenced but not navigable in fact, were within the scope of the State's right to receive lands under inland waters upon statehood. See *supra* note 5. The Court indicated that a test of tidal influence, as opposed to a test of navigability, had the advantage of uniformity, certainty, and ease of application. 484 U.S. at 481. Alaska proposes that the same advantage pertains to Mr. Hoffman's test for following the high-water datum up rivers.

I reject Alaska's suggestion for two reasons. First, it is by no means clear that Mr. Hoffman's method of drawing the boundary amounts to a test of tidal influence. His method, on the record before me, promises neither certainty nor ease of application. More centrally, the question here is not what submerged lands would normally pass to Alaska at statehood but where the drafters of the Executive Order intended to draw the Reserve boundary. The boundary definition made no attempt to exclude submerged lands that might be claimed by a future state: it expressly took in small lagoons, many of which are also bays that would clearly have been subject to a state's claim to lands under navigable or tidal inland waters.³⁴ It is a separate question, to be consid-

were held invalid by the state court, and the point was not contested in the Supreme Court. *Cinque Bambini Partnership v. State*, 491 So. 2d 508, 517–18 (Miss. 1986), *aff'd sub nom. Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469 (1988).

³⁴ Examples include Peard Bay and several features listed in note 29. That these would have been deemed inland waters at the time of the 1923 Order seems clear from the sources reviewed *supra* in section III(F)(2).

In the case of rivers, even the limit of tidal influence may not be the limit of submerged lands that would normally have passed to Alaska at statehood. Such lands also include the bottoms of navigable freshwater rivers. E.g., *Phillips Petroleum*, 484 U.S. at 479. Whereas it was given that the waters in *Phillips Petroleum* were not navigable in fact, the record here does not disclose whether and how far the rivers of the Petroleum Reserve are navigable beyond the limit of tidal influence.

ered in section E, whether Alaska retains the rights to such lands even though they are inside the boundary.

In light of the ordinary meaning of "coast" as excluding river banks, the difficulties in defining and locating the place where a tidal datum intersects a river, and the views expressed by the Court in the *Knight* case, I find that the Reserve boundary does not extend up rivers. For rivers whose mouths meet the boundary (rather than flowing into lagoons that are already behind the boundary), it will be necessary to draw the boundary as crossing river mouths.

5. Conclusion

A broader view of the Executive Order reinforces the conclusions of this section. It is unlikely that the drafters of the boundary description would reach out beyond the mainland to embrace lagoons formed by islands but would define the boundary elsewhere as going inside of water bodies that are even more cut off from the ocean. For the policy purpose of conserving underground petroleum resources, the relatively smooth boundary defined by small water crossings is also more appropriate than one that would follow the sinuosities of the shore into small inlets and go part way up rivers. See *infra* note 68 and accompanying text.

I therefore recommend that the Executive Order be interpreted so that the following submerged lands are within the exterior boundary of the National Petroleum Reserve-Alaska:³⁵

³⁵ According to the description in the Executive Order, the highest high-water mark would be used for the endpoints of closing lines across the features listed, as well as for the parts of the boundary along the shore. It has been noted that the meaning of "highest highwater mark" is unclear. French & Reed, *supra* note 6, at 28-29 (Ak. Ex. 103); Skadel, *supra* note 16, at 10 (Ak. Ex. 10). Alaska appears to interpret it as mean

1. Wainwright Inlet and the Kuk River.
2. Kugrua Bay and River.
3. Other small inlets, bays, and river estuaries, between Icy Cape and Point Barrow and between Point Tangent and the Colville River, to the extent that they constitute either (a) small lagoons with barrier reefs less than three miles offshore, in the sense of the foregoing discussion, or (b) rivers.

D. Development of the Pollard doctrine

The seaward boundary of the National Petroleum Reserve-Alaska takes in significant areas of tidally influenced waters. Kasegaluk Lagoon and Elson Lagoon are inside agreed-on segments of the boundary; Peard Bay, Wainwright Inlet, and several other areas are inside the boundary as found in the preceding sections.

That the submerged lands of these areas lie inside the

higher high water, AB 73, which is a recognized tidal datum, 1 Shalowitz, *supra* page 370, at 87 n.11.

However "highest highwater mark" is interpreted, it would be somewhat landward of the shoreline shown on charts, which usually use the line of mean high water. *Chart No. 1, Nautical Chart Symbols and Abbreviations* iii (Dep't of Defense and Dep't of Commerce, 7th ed. 1979) (Joint Ex. a). It would also be landward of Alaska's tidelands, which are defined equivalently to begin at the line of mean high tide. Submerged Lands Act, § 2(a)(2), 43 U.S.C. § 1301(a)(2) (1988).

The difference between highest high water and mean high water is estimated to be very small, for the entire tidal range in the area, measured vertically, is only six inches. See Tr. 2445. To close the gap, the Navy's 1972 Notice of Boundary Description substituted "mean high-water mark" for "highest high-water mark." 37 Fed. Reg. 10,088, 10,089 n.5 (1972). Both parties' testimony also used the high-water mark shown on available charts. Tr. 261-62 (Alaska); see Tr. 14-15, 2445, 2447 (United States). The Master is aware of no objections to using the mean high-water mark in locating the endpoints of closing lines and the parts of the boundary along the shore.

boundary of the National Petroleum Reserve-Alaska does not of itself establish that the United States has title to the lands. When the Reserve was created in 1923, Alaska was a territory, and the general rule is that lands under navigable waters within a territory are held in trust for future states. *Utah Div. of State Lands v. United States*, 482 U.S. 193, 196 (1987); *Montana v. United States*, 450 U.S. 544, 551 (1981).

1. Early history

The rule has its origins in *Martin v. Waddell*, 41 U.S. (16 Pet.) 367 (1842), which concerned navigable waters in New Jersey, one of the original states. The plaintiff, suing in ejectment for lands under the Raritan River and Bay, traced his claim to rights granted to the duke of York in the seventeenth century. The defendant, who had an oyster fishery on the lands, was in possession under an 1824 New Jersey statute.

The decision turned on the construction of the original charters to the duke. These had included rights both of property and of government, but the rights of government had been returned to the Crown in 1702, leaving plaintiff's claim to rest on the rights of property. The Court, holding for the defendant, concluded that lands under navigable waters were not intended to become private property under the charters. Rather, "the shores, and rivers and bays and arms of the sea, and the land under them" were to be "held as a public trust for the benefit of the whole community, to be freely used by all for navigation and fishery, as well for shell-fish as floating fish" *Id.* at 413. Accordingly, the lands had been restored to the Crown with the rights of government. At independence, they then passed to New Jersey as successor to the Crown. *Id.* at 416.

In *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845), the doctrine of *Martin v. Waddell* was extended to the subse-

quently admitted states. At issue were lands that, when Alabama entered the Union in 1819, had been below the high-water mark of the Mobile River. The plaintiff, suing in ejectment, claimed under a federal patent and acts of Congress, all postdating statehood.

In rejecting the claim, the Court found that the lands of Alabama had been acquired by the United States in part by cession from Georgia, an original state, in 1802 and in part through the Louisiana Purchase in 1803. *Id.* at 221, 227-28. The deed from Georgia had incorporated a provision from the Northwest Ordinance of 1787:

And whenever any of the said States shall have sixty thousand free inhabitants therein, such State shall be admitted, by its delegates, into the Congress of the United States, on an equal footing with the original states, in all respects whatever

An Ordinance for the Government of the Territory of the United States north-west of the river Ohio, art. V (1787), reprinted in 1 Stat. 51, 53 and in U.S.C., vol. 1, at li, liii (1994). The Court therefore concluded that the lands had passed to Alabama at statehood, just as for the original thirteen states:

Alabama is therefore entitled to the sovereignty and jurisdiction over all the territory within her limits, subject to the common law, to the same extent that Georgia possessed it before she ceded it to the United States. To maintain any other doctrine, is to deny that Alabama has been admitted into the union on an equal footing with the original states In the case of *Martin and others v. Waddell*, 16 Pet., 410, the present chief justice, in delivering the opinion of the court, said: "When the Revolution took place, the people of each state became themselves sovereign; and in that character hold the absolute right to all their navigable waters, and the soils under them for

their own common use, subject only to the rights since surrendered by the Constitution."

44 U.S. at 228-29.

According to *Pollard*, Alabama was admitted to the Union on an equal footing with the original states and so, upon admission, received the rights to lands under its navigable waters. The Court has explained that the doctrine is constitutional in stature. *Oregon ex rel. State Land Board v. Corvallis Sand & Gravel Co.*, 429 U.S. 363, 374 (1977); *Coyle v. Smith*, 221 U.S. 559, 565-67, 570-73 (1911) (deriving equal footing from the power of Congress under article IV, section 3, of the Constitution to admit "new States . . . into this Union").³⁶

In *Pollard*, the United States' attempt to convey submerged lands took place after Alabama's statehood. The Court indicated that, before Alabama's admission, the United States held the territory in trust for the future state. *Id.* at 222-23. In dictum, it also suggested that the United States could take no steps to defeat the passage to the states of title to land under navigable waters. *Id.* at 230; see *Utah Div. of State Lands v. United States*, 482 U.S. at 196.

The Court retracted this dictum in *Shively v. Bowlby*, 152 U.S. 1 (1894). The case considered a claim to land patented, while Oregon was a territory, under the Oregon Donation Act, ch. 76, 9 Stat. 496 (1850). The land was described as bounded on the north by the Columbia River, and the part disputed was below the high-water mark of the river. 152 U.S. at 9. The Court found that the Act contained "nothing indicating any intention on the part of Congress to depart from its settled policy of not granting to individuals lands under tide waters or navigable rivers." *Id.* at 51. It explained this policy as follows:

³⁶ See also Denis P. Duffey, *The Northwest Ordinance as a Constitutional Document*, 95 Colum. L. Rev. 929 (1995).

The Congress of the United States, in disposing of the public lands, has constantly acted upon the theory that those lands, whether in the interior, or on the coast, above high water mark, may be taken up by actual occupants, in order to encourage the settlement of the country; but that the navigable waters and the soils under them, whether within or above the ebb and flow of the tide, shall be and remain public highways; and, being chiefly valuable for the public purposes of commerce, navigation and fishery, and for the improvements necessary to secure and promote those purposes, shall not be granted away during the period of territorial government; but, unless in case of some international duty or public exigency, shall be held by the United States in trust for the future States, and shall vest in the several States, when organized and admitted into the Union, with all the powers and prerogatives appertaining to the older States in regard to such waters and soils within their respective jurisdictions; in short, shall not be disposed of piecemeal to individuals as private property, but shall be held as a whole for the purpose of being ultimately administered and dealt with for the public benefit by the State, after it shall have become a completely organized community.

Id. at 49-50. Nevertheless, the Court said, Congress could have made such a grant in appropriate circumstances:

By the Constitution, as is now well settled, the United States, having rightfully acquired the Territories, and being the only government which can impose laws upon them, have the entire dominion and sovereignty, national and municipal, Federal and state, over all the Territories, so long as they remain in a territorial condition.

We cannot doubt, therefore, that Congress has the power to make grants of lands below high water mark of navigable waters in any Territory of the United States,

whenever it becomes necessary to do so in order to perform international obligations, or to effect the improvement of such lands for the promotion and convenience of commerce with foreign nations and among the several States, or to carry out other public purposes appropriate to the objects for which the United States hold the Territory.

Id. at 48 (citations omitted). See also *id.* at 28.

2. Montana and Utah

In *Montana* and *Utah*, the Court has expanded on the conditions under which such grants will be found. *Montana v. United States*, 450 U.S. 544 (1981), involved the right of the Crow Tribe to regulate hunting and fishing within its reservation, which had been created before Montana's statehood. Second Treaty of Fort Laramie, 15 Stat. 649 (1868). The case turned in part on ownership of the bed of the Big Horn River, inside the reservation boundary. The United States sought a declaratory judgment that it owned the riverbed as trustee for the Tribe.

The Court rejected the Tribe's claim of title to the bed of the Big Horn. It stated that Congress "may sometimes convey" such lands, 450 U.S. at 551 (quoting *Shively v. Bowlby*, *supra*), but that such a conveyance will not readily be found:

[B]ecause control over the property underlying navigable waters is so strongly identified with the sovereign power of government, *United States v. Oregon*, [295 U.S. 1, 14 (1935)], it will not be held that the United States has conveyed such land except because of "some international duty or public exigency." *United States v. Holt State Bank*, 270 U.S. [49, 55 (1926)]. See also *Shively v. Bowlby*, *supra*, at 48. A court deciding a question of title to the bed of a navigable water must, therefore, begin with a strong presumption against conveyance by the

United States, *United States v. Oregon*, *supra*, at 14, and must not infer such a conveyance "unless the intention was definitely declared or otherwise made plain," *United States v. Holt State Bank*, *supra*, at 55, or was rendered "in clear and especial words," *Martin v. Waddell*, *supra*, at 411, or "unless the claim confirmed in terms embraces the land under the waters of the stream," *Packer v. Bird*, [137 U.S. 661, 672 (1891)].

450 U.S. at 552 (majority opinion by Stewart, J.).

The Court acknowledged that creation of an Indian reservation can be an "appropriate public purpose" to warrant conveyance of a riverbed, 450 U.S. at 556, but it held that the language of the Treaty was not strong enough to overcome the presumption against conveyance, *id.* at 554, and that no "public exigency" existed because the Crows "were a nomadic tribe dependent chiefly on buffalo, and fishing was not important to their diet or way of life," *id.* at 556. The Court distinguished its holding in *Choctaw Nation v. Oklahoma*, 397 U.S. 620 (1970), in which conveyance of a riverbed had been found, on the basis of the "very peculiar circumstances" of that case regarding the history of the United States' relations with the Cherokee and Choctaw tribes. 450 U.S. at 555 n.5.

In *Utah Division of State Lands v. United States*, 482 U.S. 193 (1987), the dispute involved the bed of Utah Lake. It was not asserted, as in *Montana*, that the United States had conveyed the beneficial interest in the lake bed to others but rather that the United States had reserved the lake bed to itself by actions taken before Utah entered the Union in 1896.

The State of Utah acknowledged that its title to the lake bed could have been defeated by a prestatehood conveyance to a third party, but it argued that a prestatehood federal reservation of the lake bed could not have the same effect. 482 U.S. at 200-01. The Court found it unnecessary to pass upon this contention "because even if a reservation of the

bed of Utah Lake could defeat Utah's claim, it was not accomplished on these facts." *Id.* at 201. The Court then explained its approach to interpreting the effect of federal reservations:

When Congress intends to convey land under navigable waters to a private party, of necessity it must also intend to defeat the future State's claim to the land. When Congress reserves land for a particular purpose, however, it may not also intend to defeat a future State's title to the land. The land remains in federal control, and therefore may still be held for the ultimate benefit of future States. Moreover, even if the land under navigable water passes to the State, the Federal Government may still control, develop, and use the waters for its own purposes. . . .

. . . Assuming *arguendo* that a reservation of land could be effective to overcome the strong presumption against the defeat of state title, the United States would not merely be required to establish that Congress clearly intended to include land under navigable waters within the federal reservation; the United States would additionally have to establish that Congress affirmatively intended to defeat the future State's title to such land.

Id. at 202 (majority opinion by O'Connor, J.). Holding for the State, the Court concluded, "Congress did not definitely declare or otherwise make very plain either its intention to reserve the bed of Utah Lake or to defeat Utah's title to the bed under the equal footing doctrine." *Id.* at 209.

E. Issues stemming from *Montana* and *Utah*

The parties have raised a number of issues regarding the application of *Montana* and *Utah* to the National Petroleum Reserve-Alaska:

1. Does the doctrine of *Montana* and *Utah* apply only to lands under inland navigable waters, or does it also apply to lands under the territorial sea? Alaska argues that the doctrine applies to both. The United States argues that it does not apply to lands under the territorial sea and that much of the disputed land is in that category.

2. Can a prestatehood reservation or withdrawal of lands under navigable waters, as opposed to a prestatehood conveyance to a third party, defeat a new state's title? Alaska has argued that it cannot. The United States says that it can.

3. What role must Congress play in making a reservation or withdrawal that includes lands under navigable waters? Did Congress play an adequate role in this case? Alaska urges that only Congress can defeat a state's title under the equal footing doctrine and that none of the prestatehood federal actions respecting the Reserve was an action by Congress. The United States responds that Congressional action was not necessary and that in any case Congress authorized the reservation and recognized it after the fact.

4. Did this particular reservation satisfy the *Montana* and *Utah* requirements that the intention to include submerged lands be made very plain? Did a public exigency justify their reservation? Alaska urges that the inclusion of submerged lands was not made clear and was not necessary. The United States disagrees on both counts.

5. Was there an affirmative intent to defeat Alaska's title to submerged lands? Alaska says there was not; the United States says there was.

6. If it is found that the United States retained some rights in submerged lands, did it retain the full rights of ownership? Alaska has argued that the presumption favoring the State requires the narrowest possible construction of the scope of rights retained. The United States disagrees.

I will treat these questions in the order listed.

1. *Inland waters versus territorial waters*

Montana and *Utah* dealt with the beds of navigable inland waters, namely the beds of the Big Horn River and of Utah Lake. To apply the doctrine of those cases in Alaska, it may be important to know which Alaskan waters are inland waters. In Alaska, unlike the interior states, inland waters are to be distinguished from the adjoining territorial or marginal sea.³⁷

For lands under inland waters, according to *Montana* and *Utah*, there is a strong presumption that title passed to the State when it entered the Union. Alaska says that the same presumption should apply to any territorial waters inside the Reserve boundary. The United States, to the contrary, says that for any territorial waters the presumption runs in favor of the United States. The findings in section III of this report imply that some territorial waters do exist within the Reserve boundary.³⁸

The presumption of the *Montana* and *Utah* cases is founded on the equal footing doctrine announced in *Pollard v. Hagan*. See *supra* section D. In 1947, the Court held that

³⁷ For this distinction and related background, see *supra* section II. It should perhaps be emphasized that locating the seaward limit of inland waters in the vicinity of the National Petroleum Reserve-Alaska is a separate question from locating the seaward boundary of the Reserve. Of the questions before the Master, the boundary of the Reserve is the subject of questions 7 (Smith and Harrison Bays), 8 (Peard Bay), and 11 (other inlets). The line between inland and territorial waters in the vicinity of the Reserve is the subject of questions 12 (straight baselines) and 13 (other grounds for inland waters), both *supra* section III, and question 15 (southern Harrison Bay), *supra* section IV.

³⁸ Section III concluded that waters do not become inland merely because they are landward of closely spaced barrier islands. Lagoons inside the Reserve boundary are therefore territorial waters except where there are independent grounds for finding them inland, as under the rules for drawing closing lines across the mouths of bays and rivers.

the equal footing doctrine did not entitle states to lands under the territorial sea. *United States v. California*, 332 U.S. 19 (1947). The original colonies had not separately acquired ownership of such lands, for the very idea of a three-mile belt subject to ownership was only a nebulous suggestion when the Nation was formed. *Id.* at 31-33. As to policy considerations the Court explained:

Not only has acquisition, as it were, of the three-mile belt been accomplished by the National Government, but protection and control of it has been and is a function of national external sovereignty. . . .

The ocean, even its three-mile belt, is . . . of vital consequence to the nation in its desire to engage in commerce and to live in peace with the world; it also becomes of crucial importance should it ever again become impossible to preserve that peace. And as peace and world commerce are the paramount responsibilities of the nation, rather than an individual state, so if wars come, they must be fought by the nation. . . . Consequently, we are not persuaded to transplant the *Pollard* rule of ownership as an incident of state sovereignty in relation to inland waters out into the soil beneath the ocean, so much more a matter of national concern. If this rationale of the *Pollard* case is a valid basis for a conclusion that paramount rights run to the states in inland waters to the shoreward of the low water mark, the same rationale leads to the conclusion that national interests, responsibilities, and therefore national rights are paramount in waters lying to the seaward in the three-mile belt.

332 U.S. at 34-36 (footnote and citations omitted).

Congress responded to the 1947 *California* decision by enacting the Submerged Lands Act, ch. 65, 67 Stat. 29 (1953) (codified as amended at 43 U.S.C. §§ 1301-1315 (1988)). By the Act, title to certain lands beneath navigable

waters was "recognized, confirmed, established, and vested in and assigned to" the states. § 3(a), 43 U.S.C. § 1311(a). In general, the lands covered included both inland waters, to which the applicability of *Pollard* had not been questioned, and a three-mile belt beyond each state's coastline. See *supra* section II.

Alaska says that Congress intended the Submerged Lands Act to extend the equal footing doctrine to lands under the marginal sea and that the presumption in the State's favor must be extended equally. As Alaska points out, the Court has recognized that Congress was seeking in the Submerged Lands Act to undo the effects of the 1947 *California* decision. *United States v. California*, 436 U.S. 32, 37 (1978). Nevertheless, the Court has also made clear that it regards the rationale of the 1947 decision as still in force. For example, the Court said in *United States v. Maine*, 420 U.S. 515, 524 (1975):

[W]e are firmly convinced that we should not undertake to re-examine the constitutional underpinnings of the *California* case and of those cases which followed and explicated the rule that paramount rights to the offshore seabed inhere in the Federal Government as an incident of national sovereignty. That premise, as we have indicated, has been repeated time and again in the cases. It is also our view, contrary to the contentions of the States, that the premise was embraced rather than repudiated by Congress in the Submerged Lands Act of 1953, 67 Stat. 29, 43 U.S.C. § 1301. In that legislation, it is true, Congress transferred to the States the rights to the seabed underlying the marginal sea; however, this transfer was in no wise inconsistent with paramount national power but was merely an exercise of that authority.

Accord, California ex rel. State Lands Comm'n v. United States, 457 U.S. 273, 285 (1982). See also *Oregon ex rel.*

State Land Board v. Corvallis Sand & Gravel Co., 429 U.S. 363, 371 n.4 (1977) ("[T]he Submerged Lands Act did not alter the scope or effect of the equal-footing doctrine . . ."). Thus, Alaska's rights to any lands under territorial waters within the Reserve rest not on the equal footing doctrine but only on the Submerged Lands Act.

Alaska also argues, however, that the Submerged Lands Act itself adopted a standard parallel to the standard used by the Court for inland waters in *Montana* and *Utah*. The Act excepted from the grant to the states "all lands expressly retained by . . . the United States when the State entered the Union . . ." § 5(a), 43 U.S.C. § 1313(a). The United States relies on this exception in its claim to have retained submerged lands within the Reserve boundary after Alaska's admission to the Union in 1959. In the phrase "expressly retained," Alaska construes the word "expressly" as extending the presumption of *Montana* and *Utah* to lands under territorial waters.

The Court took a different view in *California ex rel. State Lands Commission v. United States*, 457 U.S. 273 (1982). There, the United States had owned upland fronting on the Pacific Ocean, which it used as a Coast Guard reservation, from the time of California's admission to the Union in 1850. Around the turn of the century, the United States constructed jetties that caused accretions, changing formerly submerged lands to uplands. The Court held that the new uplands became the property of the United States. After rejecting an equal-footing argument by California, 457 U.S. at 285-86, the Court also rejected an argument by California based solely on the Submerged Lands Act, *id.* at 286-88. It remarked, "This reading of the Act adheres to the principle that federal grants are to be construed strictly in favor of the United States." *Id.* at 287.

Alaska argues that this statement is dictum and cannot be reconciled with the Channel Islands National Monument

Case, *United States v. California*, 436 U.S. 32 (1978). The Channel Islands case dealt with a 1949 federal reservation of lands underlying the marginal sea off Anacapa and Santa Barbara Islands. The Court held that, despite the reservation, title passed to California under the 1953 Submerged Lands Act. However, the case did not involve the exception for lands "expressly retained" by the United States, and the Court did not invoke any rule of construction.³⁹

I conclude that different presumptions apply to submerged lands inside the Reserve boundary, depending on whether the waters are territorial or inland. *Montana* and *Utah* apply to lands below inland waters. For those below territorial waters, the law is more favorable to the United States, as indicated in *California ex rel. State Lands Commission*.

It is clear, however, that the presumption of *Montana* and *Utah* applies to at least some of the disputed areas. For example, the parties agree that Peard Bay, the subject of question 8, is inland water. The United States also concedes that the rivers in the Reserve are inland waters. The tidal portions of these rivers are at issue in question 11 and under the parties' agreement at final argument, *supra* page 347.

Accordingly, I will conduct the following analysis in terms of inland water principles. If the reservation satisfies *Montana* and *Utah* as to inland waters, as I find below, then it will certainly meet the less demanding standard of the Submerged Lands Act as to territorial waters.

³⁹ The Channel Islands case dealt with a poststatehood reservation and so with a different exception to the Submerged Lands Act, covering lands that were "presently and actually occupied by the United States under claim of right." § 5(a), 43 U.S.C. § 1313(a). The Court found that the United States' only claim of right stemmed from the paramount rights doctrine of the 1947 *California* decision and that Congress had meant the exception to apply only to claims with a basis other than that doctrine.

2. Reservations or withdrawals versus conveyances

According to the history already reviewed, there is a strong presumption that a new state, upon admission to the Union, takes title to lands under its inland navigable waters. The United States has the power, however, for an appropriate public purpose, to convey the title to others during the territorial period. The Court found such a conveyance in *Choctaw Nation v. Oklahoma*, 397 U.S. 620 (1970). It declined to find one in *Montana v. United States*, 450 U.S. 544 (1981).

The present question is whether the United States also has the power, for an appropriate public purpose, to defeat passage of title at statehood by reserving the submerged lands to itself. This question was raised but left open in *Utah Division of State Lands v. United States*, 482 U.S. 193 (1987).⁴⁰

⁴⁰ The following discussion sometimes refers to withdrawals as well as reservations of federal lands. The terminology has been explained as follows:

To "withdraw" public lands means to withhold them from settlement, sale, or entry under some or all of the general land laws for the purpose of maintaining the status quo because of some exigency or emergency, to prevent fraud, to correct surveys or boundaries, to dedicate the lands to an immediate or prospective public use, or to hold the land for certain future action by the executive or legislative branch of government. For example, a withdrawal "in aid of legislation" might suspend the operation of the public land laws with respect to specified lands until Congress could act on legislative proposals to include them in a national park or a reclamation project. A "reservation" is the immediate dedication of lands to a predetermined purpose and includes, in effect, a withdrawal.

U.S. Public Land Law Review Comm'n, *One Third of the Nation's Land* 42 n.1 (1970). Other writers have noted that the terms "withdrawal" and "reservation" are often used interchangeably. Charles F. Wheatley, Jr., *Study of Withdrawals and Reservations of Public Domain Lands*, at A-1 (U.S. Public Land Law Review Comm'n, 1 Background Studies, 1969 & photo. reprint); Memorandum from Assistant Solicitor, Fish and Wildlife,

Before the decision in *Utah*, Alaska argued:

The Court has never held, or even intimated, that a federal withdrawal or reservation of submerged lands underlying navigable waters—as opposed to a conveyance—will defeat a state's title under the equal footing doctrine.

....

Requiring that such lands be conveyed by the United States prior to statehood before a new state's title is defeated is the direct result of the principles underlying the equal footing doctrine: the close identification between dominion—i.e., ownership—over such lands and the exercise of local sovereignty. Because this ownership is so closely identified with sovereignty, retention by the Federal Government of ownership necessarily would diminish the sovereignty of a newly-admitted state, violating the principle underlying the equal footing doctrine that every state's sovereignty constitutionally must be equal to the sovereignty of its sister states. In other words, a federal reservation of ownership of submerged lands would constitute a direct infringement of a state's constitutional right to be admitted to the Union on an equal footing with other states.

ASB 14-16. After *Utah* Alaska maintained this position, A 2d SB 8-9, but did not develop it further.

The United States originally responded that there is no justification in principle for treating a withholding with less favor than a conveyance. It cited several precedents as upholding prestatehood reservations of submerged lands, and it argued that the Submerged Lands Act countenances such reservations. Later, the United States read *Utah* as intimat-

to Division of Refuges, Fish and Wildlife Service (Apr. 1, 1977) (Ak. Ex. 139).

ing, although not deciding, that such reservations were permissible.

I begin with the Court's own statement in *Utah*:

The State of Utah contends that only a conveyance to a third party, and not merely a federal reservation of land, can defeat a State's title to land under navigable waters upon entry into the Union. Although this Court has always spoken in terms of a "conveyance" by the United States before statehood, we have never decided whether Congress may defeat a State's claim to title by a federal reservation or withdrawal of land under navigable waters. In *Shively*, this Court concluded that the only constitutional limitation on the right to grant sovereign land is that such a grant must be for a "public purpos[e] appropriate to the objects for which the United States hold[s] the Territory." 152 U.S., at 48. In the Court's view, the power to make such a grant arose out of the Federal Government's power over Territories under the Property Clause of the United States Constitution, which provides:

"The Congress shall have Power to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States." U.S. Const., Art. IV, § 3, cl. 2.

The Property Clause grants Congress plenary power to regulate and dispose of land within the Territories, and assuredly Congress also has the power to acquire land in aid of other powers conferred on it by the Constitution. Under Utah's view, however, while the United States could create a reservoir site by granting title to Utah Lake to a private entity, the United States could not accomplish the same purpose by a means that would keep Utah Lake under federal control. We need not decide that question today, however, because even if a reservation of the bed

of Utah Lake could defeat Utah's claim, it was not accomplished on these facts.

482 U.S. at 200-01.

Given that the Property Clause "grants Congress plenary power to regulate and dispose of land within the Territories," it seems clear that the congressional power to retain land is as broad as the power to dispose of it. Indeed, Justice White, writing for the dissenters in *Utah*, said:

I am confident that Congress has the power to prevent ownership of land underlying a navigable water from passing to a new State by reserving the land to itself for an appropriate public purpose

The Property Clause of the Constitution, Art. IV, § 3, cl. 2, is the source of the congressional power. . . . [T]here is no reason to distinguish between a conveyance to a third party required for [an appropriate public] purpose and a reservation unto the United States for the same purpose. Contrary to petitioner's position, were I to make a distinction, I would more readily find a reservation constitutionally permissible than a conveyance. In the case of a reservation, the submerged lands retain their sovereign status. . . . And if Congress later determines that the lands are no longer needed by the Federal Government for a public purpose, it can at that time transfer title to the State.

482 U.S. at 209-10. The United States has made a similar argument here: that given the courts' concern about the public interest in lands underlying navigable waters, there may be "far less reason to apply the *Montana* presumption against a federal claim of withholding, as opposed to alienation." USSRB 4 (emphasis in original). Alaska replies that the continued sovereign status of the lands is only part of the point:

The point of the Equal Footing Doctrine is to assure that newly admitted states have equal sovereignty to the original 13. The result is that the lands do remain in public ownership. But it is State public ownership and not Federal public ownership.

Tr. 2471.

In considering the weight to be given to Alaska's assertion, I turn to the precedents cited by the United States. *Alaska Pacific Fisheries v. United States*, 248 U.S. 78 (1918), strongly suggests that a prestatehood reservation of submerged lands may be effective as against the future state. That case concerned an act of Congress stating:

That until otherwise provided by law the body of lands known as Annette Islands, situated in Alexander Archipelago in Southeastern Alaska, on the north side of Dixon's entrance, be, and the same is hereby, set apart as a reservation for the use of the Metlakahtla Indians

Act of Mar. 3, 1891, ch. 561, § 15, 26 Stat. 1095, 1101 (codified at 25 U.S.C. § 495 (1988)). The Court concluded that a fish trap, in deep water six hundred feet offshore, was within the reservation. Although the case was decided while Alaska was a territory, the defendant corporation made arguments based on both its fishing rights under the public trust doctrine and on the future state's rights under the equal footing doctrine. 248 U.S. at 79, 82. The Court said simply: "That Congress had power to make the reservation inclusive of the adjacent waters and submerged land as well as the upland needs little more than statement." *Id.* at 87.

The Court reached this result even though there was no conveyance to the Indians and even though, apparently, the waters were inland. Of the nature of the reservation, it said:

The reservation was not in the nature of a private grant, but simply a setting apart, "until otherwise provided by

law," of designated public property for a recognized public purpose—that of safe-guarding and advancing a dependent Indian people dwelling within the United States.

Id. at 88. Although the Court did not discuss the distinction between inland and territorial waters, the inland status of the waters at issue would have followed from the United States' position in the Alaskan boundary arbitration of 1903. See *supra* section III, pages 64–65 & note 24. A later decision of the Court has also described *Alaska Pacific Fisheries* as involving inland waters. *United States v. Louisiana*, 363 U.S. 1, 69 (1960).⁴¹

The courts of appeals have also concluded that the Federal Government may retain land beneath inland navigable

⁴¹ Alaska, pointing out that *Alaska Pacific Fisheries* was decided long before it became a state, suggests that at statehood it may actually have received title to the submerged lands in the Metlakatla reservation, subject to the Indians' continued right of occupancy. That theory appears to be inconsistent with *Metlakatla Indian Community v. Egan*, 369 U.S. 45 (1962), which was a poststatehood case on whether Alaska could prohibit the Metlakatla Indians from using fish traps. The Court remarked there, "The Metlakatla Reservation was Indian property within § 4" of the Alaska Statehood Act. 369 U.S. at 58. Section 4 of the Statehood Act provides:

As a compact with the United States said State and its people do agree and declare that they forever disclaim all right and title to any lands or other property not granted or confirmed to the State or its political subdivisions by or under the authority of this Act, the right or title to which is held by the United States or is subject to disposition by the United States, and to any lands or other property (including fishing rights), the right or title to which may be held by any Indians, Eskimos, or Aleuts (hereinafter called natives) or is held by the United States in trust for said natives

Pub. L. No. 85-508, § 4, 72 Stat. 339 (1958), reprinted as amended in 48 U.S.C. note preceding § 21 (1988). The Alaska Constitution contains a comparable disclaimer. Alaska Const. art. XII, § 12. Whatever the extent of the Indians' rights to the lands in the Metlakatla reservation, Alaska appears to have disclaimed "all right and title" to those lands.

waters by reserving them before creation of a state. *Utah v. United States*, 780 F.2d 1515, 1518 (10th Cir. 1985), *rev'd on other grounds sub nom. Utah Div. of State Lands v. United States*, 482 U.S. 193 (1987); *United States v. City of Anchorage*, 437 F.2d 1081 (9th Cir. 1971) (Alaska Railroad case, finding reservation of tidelands and submerged lands for docks, wharves, and other facilities of federal railway terminal); *United States v. Alaska*, 423 F.2d 764 (9th Cir.), *cert. denied*, 400 U.S. 967 (1970) (Kenai Moose Range case, finding reservation of bed of a navigable lake).

Finally, the Submerged Lands Act of 1953 assumes that the United States may retain lands beneath inland navigable waters. As noted in section E(1), the Act covers lands under inland waters as well as territorial waters. The rights granted or confirmed by the Act are subject to certain exceptions, including an exception for "all lands expressly retained by . . . the United States when the State entered the Union." § 5(a), 43 U.S.C. § 1313(a). By Alaska's theory, an express retention of lands under navigable inland waters would violate equal footing, and the exception for lands expressly retained would have to be restricted to submerged lands other than those under navigable inland waters.

Alaska refers to *United States v. California*, 436 U.S. 32 (1978) (Channel Islands National Monument), as holding that "a pre-Submerged Lands Act withdrawal of submerged lands . . . did not defeat California's title" ASB 15. That case, however, did not involve the equal footing doctrine. It concerned lands off Anacapa and Santa Barbara Islands, where the waters were territorial, not inland. California's rights were therefore based only on the Submerged Lands Act, and the result was purely a matter of statutory interpretation.⁴²

⁴² Even as a matter of statutory interpretation, the case did not speak to the effect of reservations in general. See *supra* note 39 and accompa-

The result suggested by *Alaska Pacific Fisheries*, the lower court cases, and section 5(a) of the Submerged Lands Act appears to be compatible with the policy considerations underlying *Montana* and *Utah*. One part of the policy stems from the public trust doctrine, which says that lands under navigable waters are to be held for the public benefit. Traditionally this benefit has been located mainly in fishing and navigation. *E.g., Martin v. Waddell*, 41 U.S. (16 Pet.) 367, 413 (1842) (navigation and fishery) (quoted *supra* page 382); *Shively v. Bowlby*, 152 U.S. 1, 49 (1894) (commerce, navigation, and fishery) (quoted *supra* page 385). The Federal Government is no less able than the states to protect such public interests.

The second part of the policy stems from the equal footing doctrine. As a matter of history, the original states acquired lands under their navigable inland waters before the Federal Government was formed. *Martin v. Waddell*, 41 U.S. at 410. Equal footing then says that later-admitted states acquire similar rights. *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845). And they can exercise these rights according to their own views of the public good. *See Phillips Petroleum Co. v. Mississippi*, 484 U.S. 469, 475-76, 483-84 (1988); *Shively v. Bowlby*, 152 U.S. at 26, 57-58.

The states' equal-footing rights, however, are not absolute. *Choctaw Nation v. Oklahoma*, 397 U.S. 620 (1970); *Alaska Pacific Fisheries v. United States*, 248 U.S. 78

nying text. As mentioned there, the United States argued that its post-statehood reservation survived the Submerged Lands Act under the "claim of right" exception. The Court found, based on the legislative history, that the United States' paramount rights in the marginal sea provided an insufficient claim of right. It implied that the reservation might have been upheld had some further claim of right existed: "The United States has pointed to no other basis for believing that the submerged lands and waters in question were owned or controlled by the United States in 1949." 436 U.S. at 39 (emphasis added).

(1918); *Shively v. Bowlby*, 152 U.S. 1, 58 (1894). During the territorial period, the Federal Government is not required to hold submerged lands strictly in trust for a future state if important considerations of "international duty or public exigency" intervene. *Shively*, 152 U.S. at 50, 58. Thus, when a prestatehood conveyance to a third party is sustained, the United States' view of the exigencies takes precedence over the future state's interest in administering its public trust. In this aspect of the policy, there is no apparent reason why a prestatehood federal reservation or withdrawal of lands because of "international duty or public exigency" should not equally take precedence.

Alaska argues for a further aspect of the policy, based on "the close identification between dominion—i.e., ownership—over [submerged] lands and the exercise of local sovereignty." ASB 16 (quoted more fully *supra* page 396). The Court in *Montana* did say that "control over the property underlying navigable waters is . . . strongly identified with the sovereign power of government," 450 U.S. at 552, and it cited *United States v. Oregon*, 295 U.S. 1, 14 (1935). The *Oregon* case said:

Dominion over navigable waters and property in the soil under them are so identified with the sovereign power of government that a presumption against their separation from sovereignty must be indulged, in construing either grants by the sovereign of the lands to be held in private ownership or transfer of the sovereignty itself.

Alaska says that, in the case of a prestatehood conveyance, ownership has already been separated from sovereignty but that, in the case of a prestatehood withdrawal and reservation, no such severance has taken place. Alaska concludes that state sovereignty is diminished by continued federal ownership in a way that it would not be if the lands were privately held. I do not find this conclusion to be self-evident,

and its particulars have not been argued.⁴³ Nor is the conclusion supported by the Court's language in *Montana* or *Oregon*.⁴⁴

I conclude that a federal reservation or withdrawal of lands beneath inland waters is constitutionally permissible under the equal footing doctrine to the same extent as is a federal conveyance. Such a reservation may therefore be sustained if it meets the tests set out in *Utah*.

3. Authority for the reservation

I concluded above that a prestatehood reservation of submerged lands, like a conveyance, can under appropriate circumstances prevent title from passing to the state on admission to the Union. I now turn to whether such a reservation was accomplished in this case.

The Court in *Utah* stated two requirements for a reservation of submerged lands to remain effective through statehood: (1) that "Congress clearly intended to include land under navigable waters within the federal reservation" and

⁴³ For the National Petroleum Reserve-Alaska, any diminution of state sovereignty over the beds of navigable waters would be attributable to more than continued federal ownership. The Alaska Statehood Act specifically authorized Congress to exercise exclusive legislative jurisdiction over the Reserve. Pub. L. No. 85-508, § 11(b), 72 Stat. 339, 347 (1958), reprinted as amended in 48 U.S.C. note preceding § 21 (1988). Alaska has not contended that this statutory retention of federal sovereignty, if applied to submerged lands, would violate equal footing.

⁴⁴ In contrast to the situation here, *Montana* involved a potential alienation of public sovereignty as well as of public ownership. The underlying dispute concerned tribal authority to regulate "non-Indian fishing and hunting on reservation land owned in fee by nonmembers of the Tribe." 450 U.S. at 544. As the Seventh Circuit Court of Appeals stated in explicating the basis of *Montana*, "[T]he people . . . have a compelling interest in seeing that powers reposed in their government are not surrendered to private, non-representative groups." *Wisconsin v. Baker*, 698 F.2d 1323, 1334 (7th Cir.), cert. denied, 463 U.S. 1207 (1983).

(2) that "Congress affirmatively intended to defeat the future State's title to such land." 482 U.S. at 202. Alaska would infer a third requirement from *Utah*, namely that "Congress (and not the federal executive, acting alone) . . . took the actions that allegedly defeat a new state's title." A 2d SB 12. The United States replies that *Utah* introduced no such third requirement and that, in any case, the federal executive was not acting alone because the withdrawal and reservation were authorized by act of Congress.

In this section I consider the asserted third requirement as it applies to the Executive Order issued in 1923. The two following sections will deal with requirements 1 and 2.

Alaska's argument for a third requirement relies on *Utah*'s repeated use of language going to Congressional intent. The *Utah* decision does emphasize the Congressional role, as the tests quoted above illustrate. However, the documents requiring interpretation in *Utah* were mainly acts of Congress, and many of the Court's references to Congressional intent arose simply for that reason. Where relevant documents came from the executive branch, the Court reviewed those materials with equal care.

In *Utah*, a broad 1888 statute had reserved from sale "all the lands which may hereafter be designated or selected . . . for sites for reservoirs, ditches or canals for irrigation purposes and all the lands made susceptible of irrigation by such reservoirs, ditches, or canals." Sundry Appropriations Act of 1888, ch. 1069, 25 Stat. 505, 527. In 1889, the Director of the United States Geological Survey had selected "the site of Utah Lake" as a reservoir site. In 1890, Congress repealed the 1888 Act with a savings clause for reservoir sites already selected. Sundry Appropriations Act of 1890, ch. 837, 26 Stat. 371, 391.

The Court first found that the 1888 Act did not refer to lands under navigable waters. 482 U.S. at 204. It found next that the Geological Survey, in selecting "the site of

Utah Lake," had not intended to select the lake bed. *Id.* at 204-07. It then concluded that the 1890 Act did not ratify any reservation of the lake bed. *Id.* at 207.

I do not find in the case any basis for a requirement that the reservation of submerged lands be accomplished by Congress itself. If Congress could have ratified an unauthorized executive reservation of the lake bed, as the Court implied, surely Congress could have delegated authority to make the reservation in the first instance.

I turn, therefore, to the question whether Congress authorized the reservation of submerged lands in the National Petroleum Reserve-Alaska. President Harding's 1923 Executive Order did not specify a particular legal basis, stating only that it was issued "by virtue of the power in me vested by the laws of the United States." *See supra* note 1.

The United States points to the Pickett Act as authority for the Order. Act of June 25, 1910, ch. 421, § 1, 36 Stat. 847.⁴⁵ The Pickett Act stated in section 1:

⁴⁵ The United States has also suggested that the President had implied authority to withdraw submerged lands and that statutory authorization was therefore unnecessary. It cites *United States v. Midwest Oil Co.*, 236 U.S. 459 (1915), in which the Court sustained a 1909 presidential withdrawal on the theory that Congress had acquiesced in a long-standing practice of executive withdrawals, and *Withdrawal of Public Lands*, 40 Op. Att'y Gen. 73 (1941), in which Attorney General Robert H. Jackson concluded that this independent authority continued to exist even after the Pickett Act.

Alaska replies that independent executive authority to withdraw lands exists only to the extent that Congress has not provided otherwise. It notes that even in the *Midwest Oil* case the United States took the position that the President may reserve public land for public purposes "in the absence of any congressional inhibition." ARB 8-9, citing the United States' brief in *Midwest Oil*, 59 L.Ed. 673, 675. Alaska finds a congressional limitation on executive power in an earlier statute, the Alaska Right of Way Act, to be discussed below. Since the Property Clause gives Congress plenary power over the public lands, Alaska's point appears to be a strong one.

That the President may, at any time in his discretion, temporarily withdraw from settlement, location, sale, or entry any of the public lands of the United States including the District of Alaska and reserve the same for water-power sites, irrigation, classification of lands, or other public purposes to be specified in the orders of withdrawals, and such withdrawals or reservations shall remain in force until revoked by him or by an Act of Congress.⁴⁶

The issue is whether this section authorized withdrawal and reservation of submerged lands as well as uplands. Arguments have been made from the text of the Pickett Act itself and from its construction together with an earlier statute.

As to the text of the Pickett Act, Alaska notes that the Act applies to "public lands," and it has argued that public lands do not include tidelands or submerged lands.⁴⁷ Alaska may also wish to argue that the Pickett Act, in authorizing withdrawal from "settlement, location, sale, or entry," did not authorize withdrawal of submerged lands because submerged lands were already exempt from such forms of disposal.⁴⁸

⁴⁶ This section was repealed by the Federal Land Policy and Management Act of 1976, § 704(a), Pub. L. No. 94-579, 90 Stat. 2743, 2792. The implied authority of the President, *supra* note 45, was also "repealed" by the same section. The 1976 Act, a comprehensive reorganization of federal land law, covers authority for withdrawals in section 204, 43 U.S.C. § 1714 (1988).

⁴⁷ This argument, made originally with respect to the Arctic National Wildlife Range, applies equally to the National Petroleum Reserve-Alaska.

⁴⁸ Alaska has made parallel arguments concerning the Arctic National Wildlife Range, although it directs them to the interpretation of documents other than the Pickett Act.

Alaska has also argued that because the Pickett Act authorizes withdrawals only from "settlement, location, sale, or entry," the Act does not authorize withdrawal as against automatic transfer at statehood. This argument was raised before the decision in *Utah*, which distinguished between the questions (1) whether submerged lands were included in the

These arguments parallel the Court's reasoning in *Utah*, where the 1888 Act reserved lands from "sale, entry, settlement or occupation," and the Court found that the Act did not reserve submerged lands because they "were *already* exempt from sale, entry, settlement, or occupation under the general land laws." 482 U.S. at 203 (emphasis in original). The Court also quoted a definition of "public lands" as "those lands subject to sale or other disposal under the general land laws." *Id.* at 206, quoting Ernest C. Baynard, *Public Land Law and Procedure* § 1.1 (1986).

For two reasons, the Court's analysis in *Utah* is not immediately applicable to the meaning of "public lands" in the Pickett Act. First, lands beneath navigable waters in Alaska were not wholly immune from the general land laws. When Congress extended the mining laws to Alaska, it provided specifically that certain tidelands and submerged lands were to be open to mining for gold and other precious metals. Act of June 6, 1900, ch. 786, § 26, 31 Stat. 321, 329-30 (current version at 30 U.S.C. § 49a (1988)).⁴⁹

withdrawal and (2) whether a withdrawal that did include submerged lands was intended to defeat the passage of title at statehood. In this section, I am considering only a preliminary to question 1, that is, whether the Pickett Act authorized even a temporary withdrawal of submerged lands. The continuation of such a withdrawal through statehood is considered in a later section.

⁴⁹ The 1900 Act stated:

Provided, That . . . all land and shoal water between low and mean high tide on the shores, bays, and inlets of Bering Sea, within the jurisdiction of the United States, shall be subject to exploration and mining for gold and other precious metals . . . : *Provided further*, . . . citizens . . . shall have the right to dredge and mine for gold or other precious metals in said waters, below low tide

Later amendments extended these provisions beyond the Bering Sea to "the shores, bays, and inlets of Alaska," Act of May 31, 1938, ch. 297, 52 Stat. 588, and to land beneath nontidal navigable waters, Act of Aug. 8, 1947, ch. 514, 61 Stat. 916.

Second, in another case decided the same Term as *Utah*, the Court made clear that the meaning of the term "public lands" depends on the context:

We . . . reject the assertion that the phrase "public lands," in and of itself, has a precise meaning, without reference to a definitional section or its context in a statute. See *Hynes v. Grimes Packing Co.*, 337 U.S., at 114-116.

Amoco Production Co. v. Village of Gambell, 480 U.S. 531, 549 n.15 (1987) (opinion of the Court by White, J.).⁵⁰ In *Hynes v. Grimes Packing Co.*, the Court had said:

When one deals with a statute . . . large in purpose . . . one may not fully comprehend the statute's scope by extracting from it a single phrase, such as "public lands," and getting the phrase's meaning from the dictionary or even from dissimilar statutes.

337 U.S. 86, 115-16 (1949).⁵¹

⁵⁰ In *Amoco*, the Court held that the outer continental shelf was not "public lands" within the meaning of section 810(a) of the Alaska National Interest Lands Conservation Act, 16 U.S.C. § 3120(a) (1988). In reaching this result, the Court applied the definition of "public lands" given in section 102 of the Act, 16 U.S.C. § 3102:

- (1) The term "land" means lands, waters, and interests therein.
- (2) The term "Federal land" means lands the title to which is in the United States after December 2, 1980.
- (3) The term "public lands" means lands situated in Alaska which, after December 2, 1980, are Federal lands, except

The issue was whether the outer continental shelf was "in Alaska," not whether the definition covered submerged lands. 480 U.S. at 546-555.

⁵¹ In *Hynes*, a statute authorized the Secretary of the Interior to designate as an Indian reservation any "public lands which are actually occupied by Indians or Eskimos." Act of May 1, 1936, ch. 254, § 2, 49 Stat. 1250 (amending the Wheeler-Howard Act, ch. 576, 48 Stat. 984 (1934)) (repealed 1976). The Secretary designated an area defined in part as "[t]he area described above and the waters adjacent thereto extending 3,000 feet from the shore line at mean low tide." Public Land Order 128,

In *Utah*, the Court described the context as involving Congressional concern in 1888 with monopolization and speculation, which had nothing to do with the beds of navigable waters. 482 U.S. at 203. The Court also mentioned the Geological Survey's concern in 1889 that speedy action was needed to prevent settlement on lands adjacent to Utah Lake, which would interfere with its use as a reservoir. *Id.* at 206-07. Finally, the Court explained Congress's concern in 1890: The 1888 Act had caused "a perfect storm of indignation from the people of the West" because, in reserving all the land that might be designated for reservoir sites, it in effect reserved all public lands. Congress was responding to this reaction when it repealed the 1888 Act, continuing the reservation only for reservoir sites already selected. *Id.* at 199.

The background of the 1910 Pickett Act is different from the background of the *Utah* statutes. Before turning to its immediate motivation, I mention an element of the broader context that affects Alaska. This was the Alaska Right of Way Act, enacted in 1898, which said that submerged lands in Alaska were to be held in trust for the future state. Act of May 14, 1898, ch. 299, 30 Stat. 409 (current version primarily at 43 U.S.C. §§ 942-1 to 942-9 (1988)). This statute extended the homestead laws to Alaska and granted right of way through federal lands for railroads in Alaska. When a railway connected with "any navigable stream or tide water," the railroad company was empowered "to construct and

8 Fed. Reg. 8557 (1943). The Court found that the Secretary acted within his authority, "[t]aking into consideration the importance of the fisheries to the Alaska natives, the temporary character of the reservation, the Annette Islands case, the administrative determination, the purpose of Congress to assist the natives by the Alaska amendment to the Wheeler-Howard Act." 337 U.S. at 116. The Annette Islands case is *Alaska Pacific Fisheries v. United States*, discussed *supra* pages 399-400.

maintain necessary piers and wharves for connection with water transportation," provided:

That nothing in this Act contained shall be construed as impairing in any degree the title of any State that may hereafter be erected out of said District, or any part thereof, to tide lands and beds of any of its navigable waters, or the right of such State to regulate the use thereof, nor the right of the United States to resume possession of such lands, *it being declared that all such rights shall continue to be held by the United States in trust for the people of any State or States which may hereafter be erected out of said District.* The term "navigable waters," as herein used, shall be held to include all tidal waters up to the line of ordinary high tide and all nontidal waters navigable in fact up to the line of ordinary high-water mark.

Id., § 2, 43 U.S.C. § 942-1 (emphasis added).⁵² The language quoted appears to be a codification for Alaska of the equal footing doctrine.

Alaska has suggested in passing that the Right of Way Act operates to limit the powers later granted by the Pickett Act. I do not understand this argument to address the power of Congress to enact the Pickett Act, since an earlier Congress cannot bind a later one. The argument must therefore address the intent of Congress in enacting the Pickett Act.

A central purpose of the Pickett Act was to authorize the withdrawal of lands valuable for oil.⁵³ In the period just

⁵² The Federal Land Policy and Management Act of 1976, *supra* note 46, § 706(a), also modified this act, repealing it "insofar as applicable to the issuance of rights-of-way over, upon, under, and through the public lands and lands in the National Forest System."

⁵³ For the history reviewed below, see *United States v. Midwest Oil Co.*, 236 U.S. 459 (1915); Robert W. Swensen, *Legal Aspects of Mineral Resources Exploitation*, in Paul W. Gates, *History of Public Land Law*

before its enactment in 1910, lands known to be valuable for minerals were covered by the placer mining laws, originally passed in 1870 and 1872 and extended to oil lands in 1897. Rev. Stat. §§ 2329-2333 (1878) (current version at 30 U.S.C. §§ 35-38 (1988)); Act of Feb. 11, 1897, ch. 216, 29 Stat. 526. Under these laws, a locator on mineral lands could obtain title, at \$2.50 an acre, once minerals were discovered. During this same period, the Navy was converting its ships from using coal to using oil. The Director of the Geological Survey wrote in 1908 that, if nothing were done, the United States would soon be forced to buy back the very fuel resources it was now practically giving away. In September 1909, President Taft responded by withdrawing large tracts of land in California and Wyoming as a "temporary petroleum withdrawal."

This early oil-land withdrawal was made without statutory authority, and the President's power to suspend the public land laws was in considerable doubt.⁵⁴ He requested withdrawal authority in a message to Congress in 1910, 45 Cong. Rec. 621, 622, and the Pickett Act was the form in which this authority was given. Eventually the Congress adopted a new policy for public lands valuable for minerals, permitting them to be leased rather than patented. Mineral

Development 699, 721-23, 731-45 (1968); Navy Department, *History of Naval Petroleum Reserves*, S. Doc. No. 187, 78th Cong., 2d Sess. (1944); Reginald W. Ragland, *A History of the Naval Petroleum Reserves and of the Development of the Present National Policy Respecting Them* (1944). Many of the documents are collected in Max W. Ball, *Petroleum Withdrawals and Restorations Affecting the Public Domain* (U.S. Geological Survey Bull. 623, 1916). Hearings on the Pickett Act are reported in *Oil-land Withdrawals and the Protection of Locators of Oil Lands: Hearings on H.R. 24070 Before the House Comm. on the Public Lands*, 61st Cong., 2d Sess. (1910).

⁵⁴ The 1909 withdrawal was eventually sustained in *United States v. Midwest Oil Co.*, 236 U.S. 459 (1915). See *supra* note 45.

Leasing Act of 1920, ch. 85, 41 Stat. 437 (current version at 30 U.S.C. §§ 181-287 (1988 & Supp. V 1993)).

In the history of the Pickett Act I have found no direct evidence that thought was given to withdrawal of tidelands and submerged lands. I believe, however, that the Act should be construed to permit such withdrawals.

First, the Act authorized withdrawals or reservations for a wide range of purposes: "water-power sites, irrigation, classification of lands, or other public purposes to be specified in the orders of withdrawals." The statute is thus broader than the 1888 Act considered in *Utah*, which was concerned only with reservoir sites and irrigation. See *supra* page 405. An indication of the range of "other public purposes" likely to have been contemplated at the time, in addition to the protection of oil lands, may be obtained from the *Midwest Oil* case, 236 U.S. 459 (1915), in which the Court reviewed many other purposes for which lands had been withdrawn in the past. See 236 U.S. at 470; *id.* at 489 n.2 (Day, J., dissenting). Those that may have involved water-covered areas included lighthouses, water supplies for military reservations, bird refuges, Indian reservations, and reservoir sites. Although *Utah* found that a reservoir site did not require reservation of submerged lands, some of the purposes may have been thought at the time to require them. Cf. *Alaska Pacific Fisheries v. United States*, 248 U.S. 78 (1918); *Hynes v. Grimes Packing Co.*, 337 U.S. 86 (1949) (both upholding inclusion of water-covered areas within Indian reservations created under other statutes). As for oil lands themselves, the possibility of creating naval petroleum reserves was discussed at hearings on the Pickett Act, along with the possibility of drainage by drilling on adjacent land.⁵⁵ It is noteworthy that oil drilling on submerged lands

⁵⁵ *Oil-land Withdrawals and the Protection of Locators of Oil Lands: Hearings on H.R. 24070 Before the House Comm. on the Public Lands*,

had taken place well before the Pickett Act was passed.⁵⁶ The purposes of the Act thus suggest that withdrawal of submerged lands as well as upland was authorized.

Second, the Pickett Act does not itself reserve any lands but only provides authority for their withdrawal or reservation. In this respect also it is unlike the 1888 Act considered in *Utah*, which produced a wholesale closing of the public lands. Whether there is need in any particular case to include lands under navigable waters in a reservation remains open for examination in construing each separate exercise of Pickett Act authority. Similarly, the Pickett Act situation differs from that which prompted the Court to say that "Congress has never undertaken by general laws to dispose of" land under navigable waters. *Shively v. Bowlby*, 152 U.S. at 48, *quoted in Utah*, 482 U.S. at 203. Although the Pickett Act is indeed a general law, it does not provide for a general disposition of lands under navigable waters but rather for withdrawals or reservations in particular cases.

The question remains whether this reading of the Pickett Act is refuted by the existence of the Alaska Right of Way Act. I believe it is not. The Pickett Act was national in scope, whereas the Right of Way Act dealt only with Alaska. Thus, if the Pickett Act made a silent exception for Alaskan submerged lands, it should be read to except submerged lands everywhere.⁵⁷ On such a reading, the Act would not

61st Cong., 2d Sess. 111-14, 116-17, 145 (1910) (testimony of Dr. George Otis Smith, Director of the Geological Survey).

⁵⁶ See 2 Aaron L. Shalowitz, *Shore and Sea Boundaries* 268 (U.S. Dep't of Commerce Pub. 10-1, 1964) (mentioning an 1876 hydrographic survey that showed an oil well about a mile offshore in Santa Monica Bay, California); Solicitor's Opinion, 86 Interior Dec. 151, 167 (1978) (mentioning oil drilling off the California coast as early as 1896).

⁵⁷ Since lands under navigable inland waters generally pass to the states upon their admission to the Union, such an exception would have been significant primarily to areas that were not yet states when the Pick-

authorize the President to respond even to an "international duty or public exigency" of the sort referred to in *Shively v. Bowlby*, 152 U.S. at 50; *Montana*, 450 U.S. at 552; and *Utah*, 482 U.S. at 197. Such a narrow reading seems inconsistent with the authorization to act for "other public purposes to be specified in the orders of withdrawals."

Furthermore, the Court considered both the Pickett Act and the Alaska Right of Way Act in *Hynes v. Grimes Packing Co.*, 337 U.S. 86 (1949). *Hynes* was a prestatehood case in which the Secretary of the Interior had designated certain fisheries as part of an Indian reservation in Alaska. See *supra* note 51. The Secretary's order rested in part, although not principally, on a delegation to him of the President's authority under the Pickett Act. 337 U.S. at 89-90. Of the delegation the Court said:

This chain of delegated authority for the allocation of public lands in Alaska retains for future congressional action the power for the ultimate disposition of the property, land and water, within the boundaries of the reservation. Withdrawals under the Act of June 25, 1910 [the Pickett Act], are "temporary" and "until revoked by him or by an Act of Congress."

Id. at 101. The Court then quoted the Alaska Right of Way Act, *id.* at 102-03, and it reconciled the reservation of fisheries with that statute on the ground that the reservation was not a permanent disposition but remained "subject to the unfettered will of Congress." *Id.* at 106. Although in *Hynes* the authorization to reserve fisheries rested on a statute other than the Pickett Act, the same reasoning would apply to a Pickett Act reservation.

ett Act was passed in 1910. The territories at that time were Arizona, New Mexico, and Hawaii. Alaska itself was technically a district rather than a territory until 1912. See Act of Aug. 24, 1912, ch. 387, 37 Stat. 512.

I conclude that Congress authorized the reservation of submerged lands through the Pickett Act. The Alaska Right of Way Act may still be given effect, like the equal footing doctrine generally, in interpreting the intent of the executive and of later Congresses with respect to particular withdrawals or reservations in Alaska.

4. *Intention to reserve submerged lands*

Having found that the Pickett Act authorized withdrawal of submerged lands as well as uplands, I now turn to the question whether the 1923 Executive Order creating the Petroleum Reserve did reserve submerged lands. At issue are all lands under tidally influenced waters inside the Reserve boundary.⁵⁸ According to the boundary description, *supra* pages 345-46, these waters include (1) small lagoons with near-shore barrier reefs and (2) the waters landward of the Plover Islands, from Point Tangent to Point Barrow (namely Elson Lagoon, Dease Inlet, and Admiralty Bay). As I have interpreted the boundary description in question 11, tidally influenced parts of rivers are also in dispute.

a. *The precedents*

In *Montana* and *Utah* the Court announced the principles that govern interpretation of the 1923 Executive Order. In *Montana* the Court stated:

[I]t will not be held that the United States has conveyed . . . land [underlying navigable waters] except because of "some international duty or public exigency." A court deciding a question of title to the bed of a navigable water must, therefore, begin with a strong presumption against conveyance by the United States, and must not infer such

⁵⁸ As to lands under nontidal navigable waters, see *supra* note 4 and accompanying text.

a conveyance "unless the intention was definitely declared or otherwise made plain," or was rendered "in clear and especial words," or "unless the claim confirmed in terms embraces the land under the waters of the stream."

450 U.S. at 552 (citations omitted; see *supra* section D(2)). The same points were made, in much the same language, in *Utah*. 482 U.S. at 197-98.

This language sets out two requirements with respect to a prestatehood conveyance of submerged lands. The same requirements are necessary (though not sufficient) for withholding submerged lands from the state by means of a prestatehood federal reservation. See *supra* section E(2). There must be an important purpose justifying the conveyance or reservation (e.g., a "public exigency"), and there must be strong evidence of intent to convey or reserve the lands (e.g., "clear and especial words").

The facts of *Montana* and *Utah* provide a gloss on the nature of these requirements. In *Montana*, the Court held that a treaty creating an Indian reservation did not convey title to the bed of a navigable river inside the reservation boundary. As to evidence of intent to convey the riverbed, the Court said:

Whatever property rights the language of the 1868 treaty created . . . its language was not strong enough to overcome the presumption against the sovereign's conveyance of the riverbed. The treaty in no way expressly referred to the riverbed, nor was an intention to convey the riverbed expressed in "clear and especial words," or "definitely declared or otherwise made very plain." . . .

. . . The mere fact that the bed of a navigable water lies within the boundaries described in the treaty does not make the riverbed part of the conveyed land, especially when there is no express reference to the riverbed that might overcome the presumption against its conveyance.

450 U.S. at 554 (citations omitted). As I read this passage, the Court treated the lack of reference to the riverbed as evidentiary, not as decisive. An express reference was one way, but not necessarily the only way, that intent to convey the riverbed might be "made very plain." The Court in *Montana* also went on to confirm its interpretation by finding that no "public exigency" existed: "[A]t the time of the treaty the Crows were a nomadic tribe dependent chiefly on buffalo, and fishing was not important to their diet or way of life." 450 U.S. at 556. Had express reference to the riverbed been a sine qua non for its conveyance, this step would have been unnecessary.

In *Utah*, the United States was held not to have reserved the bed of Utah Lake even though certain references to the lake bed had been made. As described *supra* pages 405, 410, Congress had authorized the United States Geological Survey to select sites for reservoirs and had reserved "all the lands which may hereafter be designated or selected" for that purpose, together with "all the lands made susceptible of irrigation" by such reservoirs. The Court found that the reservation did not of itself include submerged lands, 482 U.S. at 203-04, and it then considered whether the Geological Survey, acting beyond its authority, had nonetheless selected the bed of Utah Lake. The Survey defined its selection as the "site of Utah Lake . . . together with all lands situate within two miles of the border of said lake at high water." 482 U.S. at 199. The lake bed itself was mentioned only in later annual reports to Congress. The Court, in giving a narrow construction to the Survey's language, found that the Survey's concern was not with the lake bed but with the adjacent land, whose availability to public sale and settlement might obstruct the use of the lake as a reservoir. *Id.* at 206-07.⁵⁹

⁵⁹ In one report, the Geological Survey referred to the withdrawal of Utah Lake "so far as the lands covered or overflowed by it or the lands

Having concluded that the Survey's language did not establish an intent to select the lake bed, the Court also found it did not show that Congress, in a later statute that continued previous selections, understood the lake bed to have been selected. Finally, the Court found that federal retention of the lake bed might not be required in any case: "The transfer of title of the bed of Utah Lake to Utah . . . would not necessarily prevent the Federal Government from subsequently developing a reservoir or water reclamation project at the lake in any event." 482 U.S. at 208.

Given the Court's consideration of all the circumstances in *Montana* and *Utah*, I do not find that these cases require a specific form of language in order to include submerged lands within a federal reservation or conveyance. Indeed, neither party contends that they do. At oral argument, Alaska suggested that the greater the exigency calling for the inclusion of submerged lands, the less the need for "clear and especial words." Tr. 2468-69. Alaska then emphasized its position that, if the exigency is not clear, the language must be wholly express. Tr. 2469, 2470, 2478. The United States generally agreed with Alaska on the relation between language and exigency:

[T]he true test of the *Montana* case is that there be a clear indication of intent to withhold from the future state the water body in question and that that can be sufficiently shown by clear language or by circumstances, including exigency, and that either way of showing the clear intent to withhold from the future state is sufficient.

bordering upon it were still public lands." 482 U.S. at 204. In another, the Survey reported that "the segregation" of the lake "was made to include not only the bed but the lowlands up to mean high water." *Id.* at 204-05. The Court found that the lake bed had been segregated years earlier from public sale and that the phrase "still public lands" meant lands still subject to public settlement. *Id.* at 205-06.

Tr. 2428-29. The United States noted also that, in *Alaska Pacific Fisheries v. United States*, 248 U.S. 78 (1918), the Court found a reservation of submerged lands on the basis of exigency alone. Tr. 2429, 2430. There, an Indian reservation was defined simply as "the body of lands known as Annette Islands." See *supra* page 399. The Court concluded that the reservation included submerged lands because "[t]he Indians could not sustain themselves from the use of the upland alone." 248 U.S. at 89.⁶⁰

⁶⁰ The Court in *Alaska Pacific Fisheries* said that, to determine what Congress intended in defining the reservation, one must look to "the circumstances in which the reservation was created—the power of Congress in the premises, the location and character of the islands, the situation and needs of the Indians and the object to be attained." 248 U.S. at 87. The case was cited with apparent approval in *Montana*, 450 U.S. at 556. See also *United States v. Aranson*, 696 F.2d 654, 665-66 (9th Cir.) *cert. denied*, 464 U.S. 982 (1983), in which the court of appeals stated:

Significantly, the Court in *Montana* did not overrule its earlier decision in *Alaska Pacific Fisheries v. United States*, 248 U.S. 78

Thus, we conclude that the Supreme Court's decision in *Montana* permits a court to infer congressional intent to convey the bed beneath navigable waters if the Indians can prove they depended heavily on the particular body of water.

Similarly, the Seventh Circuit Court of Appeals has said: "[W]e must . . . presume—absent evidence of a contrary intention 'definitely declared or otherwise made plain,' or of a 'public exigency' sufficient to warrant an inference of such an intention" that there was no conveyance of land underlying navigable waters. *Wisconsin v. Baker*, 698 F.2d 1323, 1335 (7th Cir.), *cert. denied*, 463 U.S. 1207 (1983) (rejecting an Indian claim to submerged lands).

The parties have cited several other lower court cases. Reservations or conveyances of submerged lands were sustained in *Confederated Salish & Kootenai Tribes v. Namen*, 665 F.2d 951 (9th Cir. 1981), *cert. denied*, 459 U.S. 977 (1982) (conveyance of lake bed at boundary of Indian reservation); *United States v. City of Anchorage*, 437 F.2d 1081 (9th Cir. 1971) (reservation for docks, wharves, and other facilities for Alaska Railroad); and *United States v. Alaska*, 423 F.2d 764 (9th Cir.), *cert.*

b. *The language and purpose of the Executive Order*

With this background, I consider whether Executive Order 3797-A shows a clear intent to reserve submerged lands. In the description of the lands reserved there are several potentially relevant provisions. First is the operative paragraph of the Order (quoted in full, *supra* note 1):

NOW, THEREFORE, I, WARREN G. HARDING, President of the United States of America, by virtue of the power in me vested by the laws of the United States, do hereby set apart as a Naval Petroleum Reserve all of the public lands within the following described area not now covered by valid entry, lease or application:

Second is the boundary description. Where there are near-shore barrier reefs, the boundary is defined as "the ocean side of the sandspits and islands forming the barrier reefs and extending across small lagoons from point to point." At the Plover Islands, the boundary is defined as following the outer shore of the islands and "extending between the most adjacent points of these islands and the sandspits at either end." Finally, the Order refers to "lands or waters":

The reservation hereby established shall be for oil and gas only and shall not interfere with the use of the lands or waters within the area indicated for any legal purpose not inconsistent therewith.

Alaska notes that the Order reserves only "public lands . . . not now covered by valid entry, lease or application." It says that public lands do not, or at least may not, include

denied, 400 U.S. 967 (1970) (reservation of "land and water" for Kenai Moose Range). As Alaska notes, however, the latter two cases were decided before *Montana*. In *Confederated Salish Tribes*, Justices Rehnquist and White dissented to the denial of certiorari, expressing doubt that the court had correctly applied the presumption of *Montana*. 459 U.S. at 978-79. For two later cases, see *infra* note 62.

submerged lands. Further, it infers that the reservation was intended to reach only lands subject to entry, lease or application, which it says do not include submerged lands.

I do not find these points dispositive. I have already concluded that the meaning of "public lands" is context dependent. See *supra* pages 407-09. As to the exclusion of lands already "covered by valid entry, lease or application," the United States responds that the exclusion of these lands "sheds no light on the scope of the reservation as regards other lands." US 2d SRB 16 n.4. This response appears correct. To provide for existing claims is not to say anything about whether claims could be made on all the lands reserved.

More centrally, Alaska emphasizes that the Executive Order nowhere mentions submerged lands as such. The United States replies that it does mention small lagoons and the area behind the Plover Islands, drawing the boundary outside these bodies. It contrasts the situation in *Montana*, where neither the riverbed nor the river itself was mentioned. See Second Treaty of Fort Laramie, 15 Stat. 649 (1868) (quoted in relevant part, 450 U.S. at 553 n.4).⁶¹

The intention behind the boundary language is illuminated by the Order's statement of the purpose of the reservation. The reservation was for oil and gas, which might lie in submerged lands as well as the upland. If the drafters had not intended to reserve the resources in submerged lands, there would have been no point in their drawing the boundary to include them.⁶²

⁶¹ The treaty in *Montana* did mention the Yellowstone River on the boundary of the Reservation, but the dispute before the Court concerned the Big Horn River. See 450 U.S. at 577 (Blackmun, J., dissenting in part); Tr. 2430.

⁶² Alaska has drawn the Master's attention to two cases that were decided after the completion of all briefings on the Petroleum Reserve. *Alaska v. Ahtna, Inc.*, 891 F.2d 1401 (9th Cir. 1989), cert. denied, 495

Furthermore, a purpose to reserve submerged lands was supported by exigent circumstances. The Executive Order contained several clauses bearing on the need for the Reserve:

U.S. 919 (1990); *State of Alaska*, 102 IBLA 357 (Interior Bd. of Land Appeals 85-768, June 10, 1988). Each held, citing *Utah*, that submerged lands were not reserved by the United States but passed to Alaska at statehood. Neither, however, is comparable to the present case.

In *Alaska v. Ahtna, Inc.*, the question concerned lands underlying thirty miles of the lower Gulkana River. If title had passed to Alaska at statehood, the lands were not available for conveyance to Ahtna by the Bureau of Land Management under the Alaska Native Claims Settlement Act, 43 U.S.C. §§ 1601-1629e (1988 & Supp. V 1993) (enacted 1971). The lower Gulkana was found to be navigable and so would normally pass to Alaska. Ahtna argued on appeal, however, that Congress had reserved title to the riverbed as property that "may be held" by Alaskan natives. This reservation was said to have been made by section 4 of the Alaska Statehood Act, quoted *supra* note 41.

The court held that section 4 was too general a statement to show clear intent to reserve lands under navigable waters. This result seems correct. Under Ahtna's contention, section 4 would have withheld from Alaska not only submerged lands previously reserved for natives, as in the Metlakatla reservation, but the beds of *all* the State's navigable rivers. See 891 F.2d at 1406.

State of Alaska involved a similar dispute over the bed of the navigable Katalla River. The Bureau of Land Management had approved the riverbed for conveyance to a native corporation, reasoning that title had not passed to Alaska at statehood because the riverbed was part of a pre-statehood federal reservation for the Chugach National Forest. The Interior Board of Land Appeals reversed, reciting the tests of *Utah* and finding that "[n]one of the establishing documents refers even remotely to lands under navigable waters or manifests a congressional intent regarding disposition of riverbed lands." 102 IBLA at 361.

In contrast to the submerged lands of the Petroleum Reserve, there appears to have been nothing in the record of *State of Alaska* linking the bed of the Katalla River to the purposes of the reservation. The area including the Katalla River was added to the Chugach National Forest, "for Forest purposes," by presidential proclamation in 1909. 35 Stat. 2231, 2232. Another purpose mentioned in the proclamation, which

WHEREAS there are large seepages of petroleum along the Arctic Coast of Alaska and conditions favorable to the occurrence of valuable petroleum fields on the Arctic Coast and,

WHEREAS the present laws designed to promote development seem imperfectly applicable in the region because of its distance, difficulties, and large expense of development and,

WHEREAS the future supply of oil for the Navy is at all times a matter of national concern,

NOW, THEREFORE, I, WARREN G. HARDING . . . do hereby set apart as a Naval Petroleum Reserve [certain lands]

. . . .

Said lands to be so reserved for six years for classification, examination, and preparation of plans for development and until otherwise ordered by the Congress or the President.

The reservation hereby established shall be for oil and gas only and shall not interfere with the use of the lands or waters within the area indicated for any legal purpose not inconsistent therewith.

The parties have also introduced two letters written to the

might have had a stronger connection to submerged lands, was the establishment of fish culture stations. *Id.* It was not clear, however, that the fish culture purpose extended to the Katalla River. See Proclamation No. 39, 27 Stat. 1052 (1892) (creating the Afognak Forest and Fish Culture Reserve); Proclamation of July 23, 1907, 35 Stat. 2149 (creating the Chugach National Forest); Exec. Order No. 908 (July 2, 1908) (consolidating the two), *microformed on* Presidential Executive Orders, Nos. 1-7403, reel 2 (Library of Congress Photoduplication Serv.); Proclamation of Feb. 23, 1909, 35 Stat. 2231 (adding the Katalla River area to the Chugach National Forest). See also Act of Mar. 3, 1891, ch. 561, § 14, 26 Stat. 1095, 1100 (mentioning sites for fish-culture stations only "on the island of Kadiak and Afognak [sic]").

Secretary of the Interior just before creation of the Reserve, one by H. Foster Bain, Director of the Bureau of Mines (Ak. Ex. 82), and one by Theodore Roosevelt, Acting Secretary of the Navy (Ak. Ex. 83; U.S. Ex. 86 at 249).

As to the "future supply of oil for the Navy," mentioned in clause 3 of the Order, the background goes back at least to 1908, when Dr. George Otis Smith, Director of the Geological Survey, made recommendations that led to President Taft's oil-land withdrawals in 1909. See *supra* page 412. After statutory withdrawal authority was given by the Pickett Act, President Taft issued orders confirming the previous withdrawals and, in 1912, modifying them to create Naval Petroleum Reserves Nos. 1 and 2 in California. Naval Petroleum Reserve No. 3, at Teapot Dome, Wyoming, was created in 1915 by Executive Order of President Wilson.⁶³ Soon after President Harding created Reserve No. 4 in 1923, Congress passed a joint resolution referring to "the settled policy of the Government, adhered to through three successive administrations, to maintain in the ground a great reserve supply of oil adequate to the needs of the Navy in any emergency threatening the national security." S.J. Res. 54, 68th Cong., 1st Sess., 43 Stat. 5, 6 (Feb. 8, 1924).⁶⁴

There can be no doubt that this purpose constitutes a public exigency sufficient to warrant a reservation including submerged lands. As the United States observes, the object of the Reserve was "to set aside potentially 'valuable petroleum fields,' which might lie beneath the shallow lagoon waters as well as the upland." USSB 7.

⁶³ For the orders creating Reserves Nos. 1 through 3, see Ball, *supra* note 53, at 283, 290, 332.

⁶⁴ The events provoking this resolution involved the earlier Naval Petroleum Reserves and were contemporaneous with the creation of Reserve No. 4. See *Mammoth Oil Co. v. United States*, 275 U.S. 13 (1927); *Pan American Petroleum & Transp. Co. v. United States*, 273 U.S. 456 (1927).

A secondary purpose of the Reserve, as stated in clause 2 of the Order, was to "promote development" in Alaska. The Navy's letter noted that development of the oil potential in northern Alaska would be "commercially practicable only if undertaken on a large scale," probably involving an extension of the Alaskan Railway and over a thousand miles of pipeline. Ak. Ex. 83; U.S. Ex. 86 at 249.⁶⁵ The Bureau of Mines' letter mentioned similar considerations, stating that "[i]n the judgment of experienced oil operators the existing law is not sufficiently elastic to permit economic development of the fields" Ak. Ex. 82. The existing law was the Mineral Leasing Act of 1920, ch. 85, 41 Stat. 437 (current version at 30 U.S.C. §§ 181-287 (1988 & Supp. V 1993)). The Bureau of Mines stated further:

Near the Arctic at several points there are large oil seepages and at two points locations have been made upon these under the leasing act of February 25, 1920. A number of permits have been granted but many of the locations are in conflict, as shown by the attached record and map of the Smith Bay district, and the process of adjudication of these claims is necessarily very slow.

. . . Under present conditions nothing other than waste of money and the acquirement by various individuals of

⁶⁵ Roosevelt's letter for the Navy added:

In view of these facts and having particularly in view the future needs of the American Navy for an adequate supply of fuel oil and other petroleum products, I would suggest that arrangements be made to set aside and designate as Naval Petroleum Reserve No. 4, the areas in Alaska hereafter specified. . . .

While this reservation will probably be of immense value to the Nation through its benefit to the American Navy, I would again invite attention to the possibilities in connection with the whole development of the Territory of Alaska and more particularly to the possibilities of obtaining a means of revenue to the Alaskan Railroad.

Ak. Ex. 83; U.S. Ex. 86 at 249

shadowy but troublesome claims on the public domain can result.

Ak. Ex. 82.

Alaska argues here that there was no need to include submerged lands in the Reserve because they were not subject to private claims. The United States replies that it was unclear in 1923 whether submerged lands were subject to the Mineral Leasing Act,⁶⁶ and it points to a statement by the Solicitor of the Interior that during the 1920s the Department issued some prospecting permits under that Act "which included submerged lands in the Arctic Ocean in the vicinity of Smith Bay." Solicitor's Opinion, 86 Interior Dec. 151, 167.⁶⁷

Be that as it may, these arguments do not reach the primary reason for creating a naval petroleum reserve. Even if the lands were immune from private claims, that would not have sufficed to make their resources available for the Navy. Furthermore, there is reason to think that the Reserve was intended to be a compact tract that would, so far as possible, be free of conflicting interests.⁶⁸ This is not to say that the

⁶⁶ The issue was first decided in 1947, when it was held that the Mineral Leasing Act does not authorize issuance of oil and gas leases offshore and outside the inland waters of the states. Solicitor's Opinion, 60 Interior Dec. 26 (1947) (Ak. Ex. 79), *upheld in Justheim v. McKay*, 123 F. Supp. 560 (D.D.C. 1954), *aff'd*, 229 F.2d 29 (D.C. Cir.), *cert. denied*, 356 U.S. 933 (1956). To the same effect is 40 Op. Att'y Gen. 540 (1947).

⁶⁷ Such permits are not in evidence, and Alaska does not concede their existence. See ASRB 16 n.9. The Solicitor's opinion states that the permits are on file in the BLM office in Anchorage. 86 Interior Dec. at 167 n.18.

⁶⁸ In the earlier naval petroleum reserves in California, the tracts withdrawn were studded with land already in other hands, much of it as a result of previous land grants to the Southern Pacific railroad. Other property within the reserves was subject to claims not yet patented. The result was considerable litigation and, where private claims were upheld, drainage of the Navy lands from private wells. See Navy Department,

executive, in 1923, had any formed intent as to the conflicting interests of a future state. The stated duration of the Reserve was indefinite: "for six years for classification, examination, and preparation of plans for development and until otherwise ordered by Congress or the President." As in *Hynes v. Grimes Packing Co.*, *supra* page 415, this left the ultimate disposition of the entire Reserve, including any submerged lands, an open question.

Finally, Alaska makes another argument based on the Bureau of Mines' letter proposing the Reserve, Ak. Ex. 82. Alaska reads the letter as making clear "that the focus of the executive order was the Arctic plain, that upland area between the crest of the mountains and the water." ASRB 16. The letter does mention the "Arctic plain" or the "Arctic slope" repeatedly. The Executive Order, however, speaks of observed seepages "along the Arctic Coast and conditions favorable to the occurrence of valuable petroleum fields on the Arctic Coast."⁶⁹ Given the Executive Order's references

supra note 53; Ragland, *supra* note 53. When the site for Reserve No. 3 was being selected in 1915, Secretary of the Navy Daniels wrote to the Secretary of the Interior:

Although it is not absolutely certain that this area [Teapot Dome] will be productive, the Navy Department considers it advisable to select this area rather than one where the presence of oil has been determined by actual producing wells, as in the latter case there would be adverse claims with the consequent litigation, strong opposition to the creation of the Reserve, and the danger of wells remaining in private ownership so as to make it possible to drain a large part of the Reserve.

Ragland, *supra*, at 44; see also Navy Department, *supra*, at 3. In 1917 the Navy submitted draft legislation to Congress that would have eliminated all private interests in Reserves Nos. 1, 2, and 3 by condemnation. Ragland, *supra*, at 60-65.

⁶⁹ The main seepage that had been documented in the Reserve area was near the shore at Cape Simpson, on the west side of Smith Bay. George C. Martin, *Preliminary Report on Petroleum in Alaska* 68-70

to the Arctic Coast, the Bureau of Mines' references to the Arctic plain are not controlling.⁷⁰

c. Conclusion

I conclude that the drafters of Executive Order 3797-A had good reason to include in Naval Petroleum Reserve No. 4 all the lands within the exterior boundary. They expressly placed small lagoons and the water bodies behind the Plover Islands inside the boundary. Since the object was to conserve underground resources and since the submerged areas were relevant only for their beds, I find that the Order reserved these submerged lands.

Rivers within the Reserve boundary, whose tidally influenced portions are also at issue, are more closely associated with the upland than are the water bodies expressly included. I therefore believe that the inclusion of the beds of tidally influenced parts of rivers follows a fortiori.

(U.S. Geological Survey Bull. 719, 1921), quoting Ernest de K. Leffingwell, *The Canning River Region, Northern Alaska* 178-79 (U.S. Geological Survey Professional Paper 109, 1919). See also P.S. Smith & J.B. Mertie, Jr., *Geology and Mineral Resources of Northwestern Alaska* 274-80 (U.S. Geological Survey Bull. 815, 1930) (summarizing information acquired through 1926).

⁷⁰ Even the Bureau of Mines' letter, in a passage quoted by Alaska, recognizes that oil fields might occur near the coast:

In the further judgment of officers of the Geological Survey and the Land Office most familiar with the region and who have been consulted, it is probable that the seepages themselves are in or from recent sands too unconsolidated to hold large quantities of oil and that the important fields are likely to be found either deeper or further back from the coast or both. Practical oil men familiar with the reports of competent private geologists who have studied parts of the field tell me that there is reason to believe that oil fields of first magnitude may seriously be expected to develop somewhere on this Arctic slope.

Ak. Ex. 82 (emphasis added).

Accordingly, I interpret the Executive Order to include all lands under tidally influenced waters inside the boundary as part of the Reserve.⁷¹

5. *Intention to defeat state title*

There remains the question whether there was affirmative intent to defeat the future State's title to submerged lands in the Petroleum Reserve. This is the second test of *Utah*, *supra* section D(2). In *Utah* itself, the Court needed to consider only prestatehood legislation as conceivably showing an intention to defeat Utah's claim to the lake bed. See 482 U.S. at 208-09. Here, in contrast, the United States relies on the Alaska Statehood Act, Pub. L. No. 85-508, 72 Stat. 339

⁷¹ The extent of the 1923 reservation is of course not affected by later legislation. Later legislation is, however, quite consistent with a comprehensive reading of the 1923 reservation. The Naval Petroleum Reserves Production Act of 1976, Pub. L. No. 94-258, § 102, 90 Stat. 303 (codified as amended at 42 U.S.C. § 6502 (1988)), provided:

The area known as Naval Petroleum Reserve Numbered 4, Alaska, established by Executive order of the President, dated February 27, 1923 . . . shall be transferred to and administered by the Secretary of the Interior . . . [A]ll lands within such area shall be redesignated as the "National Petroleum Reserve in Alaska" Subject to valid existing rights, all lands within the exterior boundaries of such reserve are hereby reserved and withdrawn from all forms of entry and disposition under the public land laws

According to the conference report on the 1976 Act, the withdrawal provision was intended "to override the unexpected interpretation" of the 1923 Executive Order in *Arnold v. Morton*, 529 F.2d 1101 (9th Cir. 1976). H.R. Conf. Rep. No. 942, 94th Cong., 2d Sess. 20, *reprinted in* 1976 U.S. Code Cong. & Admin. News 516, 522. The *Arnold* case had held that lands inside the Reserve boundary that were covered by valid entry, lease, or application in 1923 did not become part of the Reserve when the claims expired.

(1958), *reprinted as amended in* 48 U.S.C. note preceding § 21 (1988).⁷²

The Statehood Act was clearly meant to be the controlling document regarding property rights as between Alaska and the United States. Section 4 of the Act begins:

As a compact with the United States said State and its people do agree and declare that they forever disclaim all right and title to any lands or other property not granted or confirmed to the State or its political subdivisions by or under the authority of this Act, the right or title to which is held by the United States or is subject to disposition by the United States

Section 5 provides:

The State of Alaska and its political subdivisions, respectively, shall have and retain title to all property, real and personal, title to which is in the Territory of Alaska or any of the subdivisions. Except as provided in section 6 hereof, the United States shall retain title to all property, real and personal, to which it has title, including public lands.

Section 6 makes exceptions for numerous categories of federal property to be transferred to the State. The exception relevant here is section 6(m), making the Submerged Lands Act applicable to Alaska. Submerged Lands Act, ch. 65, 67 Stat. 29 (1953) (codified as amended at 43 U.S.C. §§ 1301-1315 (1988)).

Insofar as the Submerged Lands Act deals with lands subject to the equal footing doctrine, it confirms the states'

⁷² Alaska argues, as it did of the first *Utah* test, that the intent to defeat state title must be that of Congress itself. See *supra* pages 404-06. Because the United States relies on acts of Congress, it is unnecessary to pass on this point.

rights to receive lands under their inland navigable waters at statehood. The Act also grants additional submerged lands to the states. Both types of lands are covered by section 3 of the Submerged Lands Act, which provides that title to lands beneath navigable waters within the state boundaries is "recognized, confirmed, established, and vested in and assigned to" the states. § 3(a), 43 U.S.C. § 1311(a).

Like the equal footing doctrine, the Submerged Lands Act is subject to exceptions. Section 5 states: "There is excepted from the operation of section 3 of this Act . . . all lands expressly retained by . . . the United States when the State entered the Union . . ." § 5(a), 43 U.S.C. § 1313(a). Thus, if Congress "expressly retained" submerged lands in the Reserve at Alaska's statehood, that would be strong evidence that it intended to defeat Alaska's title.

The United States points to section 11(b) of the Alaska Statehood Act as an express retention. Section 11(b), which authorizes exclusive federal legislative jurisdiction over certain lands, states in part:⁷³

Notwithstanding the admission of the State of Alaska into the Union, authority is reserved in the United States, subject to the proviso hereinafter set forth, for the exercise by the Congress of the United States of the power of exclusive legislation, as provided by article I, section 8, clause 17, of the Constitution of the United States, in all cases whatsoever over such tracts or parcels of land as, immediately prior to the admission of said State, are owned by the United States and held for military, naval, Air Force, or Coast Guard purposes, including naval petroleum reserve numbered 4

⁷³ For general background on federal legislative jurisdiction over federal land, see U.S. Public Land Law Review Comm'n, *One Third of the Nation's Land* 277-79 (1970).

Section 11(b), in referring to the Reserve as "owned by the United States," clearly contemplates continued federal ownership of the Reserve. Alaska contends, however, that although the uplands remain in federal ownership, the section shows no such intent as to submerged lands. Alaska also refers to two provisos to section 11(b), which are as follows:

Provided . . . (ii) that the reservation of authority in the United States for the exercise by the Congress of the United States of the power of exclusive legislation over the lands aforesaid shall not operate to prevent such lands from being a part of the State of Alaska, or to prevent the said State from exercising over or upon such lands, concurrently with the United States, any jurisdiction whatsoever which it would have in the absence of such reservation of authority and which is consistent with the laws hereafter enacted by the Congress pursuant to such reservation of authority; and (iii) that such power of exclusive legislation shall rest and remain in the United States only so long as the particular tract or parcel of land involved is owned by the United States and used for military, naval, Air Force, or Coast Guard purposes. . . .

Regarding proviso ii, Alaska notes that concurrent state jurisdiction is provided unless Congress enacts laws to the contrary, and it says that this includes jurisdiction over submerged lands. Regarding proviso iii, Alaska notes that the Reserve was transferred by 1976 legislation from the Navy to the Secretary of the Interior. Naval Petroleum Reserves Production Act of 1976, § 102, *supra* note 71. Thus, Alaska says that the Reserve is no longer used for military or naval purposes and that, under proviso iii, full jurisdiction has reverted to the State.

Both the provisos go to jurisdiction over the lands in the Reserve, not to ownership. The uplands and submerged

lands alike were included, under the main clause of section 11(b), in "such tracts or parcels of land as, immediately prior to the admission of said State, are owned by the United States . . . including naval petroleum reserve numbered 4." Nothing in section 11(b) suggests that different jurisdictional patterns were to apply within the Reserve depending on whether the lands were upland or submerged.

As to whether different ownership patterns were to apply, the parties have cited the legislative history of the Statehood Act and other acts passed by the same Congress. One of these acts authorized prestatehood oil and gas leasing of Alaskan submerged lands. Act of July 3, 1958, Pub. L. No. 85-505, 72 Stat. 322.⁷⁴ As passed by the House, the bill applied to all Alaskan lands beneath inland navigable waters,

⁷⁴ Leasing was to be by the Secretary of the Interior, under the Mineral Leasing Act of 1920. Ninety percent of the revenues were to go to the Territory of Alaska. After statehood, the United States' rights in any leases were to be transferred to Alaska.

The Interior Department, which proposed the legislation in May 1957, explained its object as follows:

It is very important to the future of the Territory of Alaska that some authority be established under which the lands lying beneath inland navigable waters, such as bays, estuaries, lakes, and rivers may be leased for oil and gas. At the present time neither the Federal Government nor the Territory has authority to lease these water-covered areas, the title to which is held by the United States in trust for the benefit of a future State or States. The Federal Government leases only the land areas bordering upon inland navigable waters. Consequently, parties holding leases on areas bordering on such inland bodies of navigable water may, if a producing field is discovered, drain oil and gas from the water-covered areas. Alaska thus loses income to which it will one day presumably be entitled since it is expected that title to the water-covered areas will vest in Alaska upon its admission to the Union as a State.

S. Rep. No. 1720, 85th Cong., 2d Sess. (1958), reprinted in 1958 U.S. Code Cong. & Admin. News 2893, 2898-99.

including offshore areas like bays and tidelands as well as nontidal waters in the interior. H.R. 8054, 85th Cong., 1st Sess. § 1, 103 Cong. Rec. 13,612-13 (1957). The bill provided for leasing even within federal reservations. *See id.*, § 5. It did not mention the Petroleum Reserve, presumably because the naval petroleum reserves were already generally excluded from the Mineral Leasing Act. Mineral Leasing Act of 1920, ch. 85, § 1, 41 Stat. 437, as amended by the Act of Aug. 8, 1946, ch. 916, § 1, 60 Stat. 950 (current version at 30 U.S.C. § 181 (1988)).

At Senate hearings, the question arose whether the Petroleum Reserve was adequately protected. Senator Anderson of New Mexico asked:

Does this bill take any recognition of the fact that the whole northern part of Alaska is set aside for a naval reserve? Does this allow you to go out and lease offshore from a naval reserve and drain that area?

Alaskan Submerged Lands: Hearings on H.R. 8054 Before the Senate Comm. on Interior and Insular Affairs, 85th Cong., 2d Sess. 28 (1958). Senator Jackson of Washington read into the record a memorandum from counsel:

Naval Petroleum Reserve No. 4 should be protected. The bill does not specifically prevent applications for oil leases on the Arctic coast tidelands abutting Naval Petroleum No. 4. It cannot be intended to allow such an encroachment in this area.

Id. at 29. In the bill reported by the Senate committee, leasing authority for tidal waters was deleted, restricting its operation to navigable lakes and streams. S. Rep. No. 1720, *supra* note 74. From the Senators' remarks, it was clearly assumed that lakes and streams inside the Reserve would not be subject to leasing. The bill was enacted with the Senate committee amendment, 104 Cong. Rec. 11,900, 12,256-57

(1958), and was approved on July 3, 1958, only four days before the Alaska Statehood Act. For the policy of the Statehood Act to be consistent with that of the 1958 Leasing Act, the Statehood Act too must have assumed that submerged lands in the Reserve would remain the property of the United States.⁷⁵

The same conclusion is suggested by an act of September 7, 1957, Pub. L. No. 85-303, 71 Stat. 623, which granted

⁷⁵ Alaska has cited an earlier Senate hearing on the same legislation for the proposition that Congress expected all lands under navigable waters to pass to Alaska at statehood. The passage cited reads as follows:

Mr. HOFFMAN [minerals staff officer, Bureau of Land Management]. . . . [T]his bill provides under the Mineral Leasing Act Alaska would get 90 percent of the income of that 12 1/2 percent [royalty] or 5 percent [royalty], whichever the case may be, and of the rentals.

As to navigable waters if Alaska goes into statehood they would get 100 percent of the navigable waters.

Senator BARRETT. That is my understanding up to now.

Hearing before the Subcomm. on Territories of the Senate Comm. on Interior and Insular Affairs, 85th Cong., 1st Sess. (1957), printed in *Alaskan Submerged Lands: Hearings on H.R. 8054 Before the Senate Comm. on Interior and Insular Affairs*, 85th Cong., 2d Sess. 117, 124 (1958). In context, it seems clear that "100 percent" did not refer to what submerged lands Alaska would receive at statehood but to what its share of the royalties would be on leases issued under the Act. See *supra* note 74. The point was restated less elliptically later in Mr. Hoffman's testimony:

Senator BARRETT. Mr. Hoffman, who owns the oil and gas under the navigable waters of the Territory of Alaska at the present time?

Mr. HOFFMAN. It is held in trust by the United States for the better of the future State in Alaska.

Senator BARRETT. Not for the Territory of Alaska?

Mr. HOFFMAN. Not for the Territory. The Territory can only get what you in Congress provide by law, as in this case, it gives them 90 percent.

When it becomes a State it will be entitled to the 100 percent under navigable waters.

Alaskan Submerged Lands, supra, at 128.

title to certain lands beneath tidal waters to the Territory of Alaska.⁷⁶ The grant in the 1957 Act covered lands in Alaska "including improvements thereon and natural resources thereof, lying offshore of surveyed townsites in the Territory between the line of mean high tide and the pierhead line." § 2(a).⁷⁷ Excepted from the grant were "all oil and gas

⁷⁶ The committee reports explained the object of the 1957 Act as follows:

By the act of May 14, 1898 (30 Stat. 409; 48 U.S.C., sec. 411) [the Alaska Right of Way Act, now at 43 U.S.C. § 942-1] the tidelands in Alaska . . . were reserved for the future State and consequently they can be disposed of only at the direction of Congress. By the same act, the Department of the Interior was designated to administer the lands but without the authority to dispose of them, to lease them, or to grant, in any permanent form, permission to use them. . . .

Over the years there has been considerable development in southeast Alaska on fills and pilings over the tidelands and even beyond over the submerged lands. Included among these improvements are not only docks and warehouses but also streets, hotels, stores, schools, and private residences, most of which are in Juneau, Ketchikan, Cordova, and Valdez. . . .

Actually, under existing statutes, many of the structures constitute trespass because of the lack of authority to legalize the occupancy of the lands where permanent improvements are involved. While bringing trespass charges against the owners would eliminate the structures, a substantial portion of Alaska's real-property assets would be destroyed without serving the desired purpose. Moreover, a substantial source of revenue to the Territory is being lost because there is no authority for the administration of the tidelands and, consequently, no rentals are being paid or purchase fees collected because no patents can be issued. Private investors refuse to interest themselves in property or construction under these circumstances.

H.R. Rep. No. 950, 85th Cong., 1st Sess. (1957); S. Rep. No. 1045, 85th Cong., 1st Sess. (1957), reprinted in 1957 U.S. Code Cong. & Admin. News 1933.

⁷⁷ The "pierhead line" was defined as a line parallel to the line of mean low tide and far enough offshore to encompass certain manmade structures. § 1(b).

deposits located in the submerged lands along the Arctic coast of naval petroleum reserve numbered 4 between the line of mean high tide and the pierhead line." § 3(d).⁷⁸ Thus this Act too evidences the assumption that resources in submerged lands in or adjacent to the Reserve were to be protected.⁷⁹ Again, if under the Statehood Act passed ten months later submerged lands within the Reserve were to go to the State, there would have been a silent change of congressional policy.

Alaska has referred to Senate committee reports on both these statutes to show that the 85th Congress, the Congress that enacted the Statehood Act, was aware that submerged lands were held for the benefit of the future state. S. Rep. No. 1720, *supra* note 74, and S. Rep. No. 1045, *supra* note 76. It also quotes from earlier hearings on the Statehood Act, in which members of the same Senate committee made clear their awareness of the equal footing doctrine and its restatement in the Alaska Right of Way Act. *Alaska Statehood: Hearings on S. 50 Before the Senate Comm. on Interior and Insular Affairs*, 83th Cong., 2d Sess. 215-16, 223-25, 280-82 (1954). Alaska's argument, however, goes only to congressional awareness of the general rule regarding the treatment of submerged lands at statehood. It does not speak to whether Congress meant to make an exception to the general rule in the particular case of the Petroleum Reserve.

Alaska also notes that Congress was concerned about the

⁷⁸ The record does not reveal whether any surveyed townsites existed in the Reserve. However, the grant was also to extend to townsites that might be surveyed in the future. § 2(a).

⁷⁹ Where the Reserve boundary follows the highest high water mark along parts of the coast without lagoons, the strip described in the 1957 Act would lie just outside the Reserve. Where the Reserve boundary crosses water to include small lagoons and the area behind the Plover Islands, the strip would lie inside the boundary.

extent of federal withdrawals and reservations in Alaska, which were said to amount to 95 million acres, over a quarter of Alaska's total area. H.R. Rep. No. 624, 85th Cong., 1st Sess. 5-6 (1957), *reprinted in* 1958 U.S. Code Cong. & Admin. News 2933, 2937 (report accompanying the statehood bill). The Petroleum Reserve alone is about 23 million acres or 35 thousand square miles—nearly the size of Indiana. Joint Statement 17; Ak. Ex. 82; A 2d SRB 23. Nevertheless, Congress chose not to deal with that issue in the Alaska Statehood Act. In 1954, with the Navy's agreement, serious consideration was given to revoking the Petroleum Reserve entirely.⁸⁰ By 1955, the Administration's position had changed, with the Departments of Defense and the Interior both recommending retention of the Reserve.⁸¹ In 1957, specific mention of the Petroleum Reserve was written into what is now section 11(b) of the Statehood Act, at the suggestion of Administration witnesses.⁸² Indeed, the 85th Congress passed another statute restricting the executive power to withdraw public lands for defense purposes, but it specifically exempted withdrawals for naval petroleum reserves from the restrictions. Act of Feb. 28, 1958, Pub. L. No. 85-

⁸⁰ *Alaska Statehood: Hearings on S. 50 Before the Senate Comm. on Interior and Insular Affairs*, 83th Cong., 2d Sess. 165-66, 167-69, 191, 343-47, 349, 350 (1954).

⁸¹ *Alaska-Hawaii Statehood, Elective Governor, and Commonwealth Status: Hearings on S. 49, S. 399, and S. 402 Before the Senate Comm. on Interior and Insular Affairs*, 84th Cong., 1st Sess. 87-88 (1955); *Hawaii-Alaska Statehood: Hearings on H.R. 2535, H.R. 2536, and Related Bills Before the House Comm. on Interior and Insular Affairs*, 84th Cong., 1st Sess. 223 (1955).

⁸² See *Alaska Statehood: Hearings on S. 49 and S. 35 Before the Senate Comm. on Interior and Insular Affairs*, 85th Cong., 1st Sess. 2, 4 (1957); *Statehood for Alaska: Hearings on H.R. 50 and Other Bills Before the Subcomm. on Territorial and Insular Affairs of the House Comm. on Interior and Insular Affairs*, 85th Cong., 1st Sess. 104 (1957).

337, § 1(2), 72 Stat. 27 (codified at 43 U.S.C. § 155(2) (1988)).

Reading the Alaska Statehood Act in the light of the other statutes enacted by the same Congress, I conclude that Congress intended to retain the submerged lands in the Petroleum Reserve for the United States and to defeat Alaska's title to those lands.

6. *The scope of the rights retained*

I have found above that a federal reservation of submerged lands, under appropriate circumstances, may remain effective beyond statehood without violating the equal footing doctrine. I have also found that such a reservation was accomplished with respect to the National Petroleum Reserve-Alaska. Alaska argues further that, even if the Reserve includes submerged lands,

state ownership of those submerged lands is qualified only to a limited extent. . . . [T]he federal government reserved rights to the oil, gas and other hydrocarbon resources. However, title (including unrestricted ownership of other subsurface resources) passed to the state.

ASB 20; see Tr. 2472-77, 2480-82.

Alaska's theory is based both on the equal footing doctrine and on the terms of the 1923 Executive Order. In the Executive Order, Alaska points to the final paragraph:

The reservation hereby established shall be for oil and gas only and shall not interfere with the use of the lands or waters within the area indicated for any legal purpose not inconsistent therewith.

As to the equal footing doctrine, Alaska says:

Even in the face of an international duty or public exigency, the equal footing doctrine requires that all of the attributes of ownership which are not directly implicated

in that duty or exigency must pass to the state, and even those attributes directly implicated must be presumed to pass to the state. The burden is then on the United States to demonstrate by clear and convincing evidence which severable rights of ownership, if any, were retained by virtue of the withdrawal or reservation. Any and all other rights of ownership, of necessity, pass to the new state to minimize the impact of the federal government's retention of certain ownership rights on the new state's sovereignty.

ASB 18. As a corollary, it concludes that "once the international duty or public exigency no longer exists and a withdrawal or reservation is revoked," the state's rights ripen "into full fee simple title." ASB 19 n.8.⁸³

The United States responds that Alaska's interpretation of the equal footing doctrine is unprecedented, and it explains the clause quoted from the Order as bearing on the purpose of the Reserve rather than its scope. See Tr. 2433-35, 2505-09. The scope is said to be fixed by an earlier paragraph setting apart "all of the public lands" within the described area, not simply the petroleum rights, as a naval petroleum reserve. For uplands in the Reserve, the paragraph regarding oil and gas is said "merely [to] indicate the extent to which

⁸³ Alaska likens its theory to the theory adopted by the Court in *Beecher v. Wetherby*, 95 U.S. 517 (1877). There, the United States had granted lands to the State of Wisconsin subject to the existing occupancy of the Menomonee Indians. The Court characterized the grant as conveying "only the naked fee" to the State. *Id.* at 525. It added that "[t]he possession, when abandoned by the Indians, attaches itself to the fee without further grant." *Id.* at 526, quoting *United States v. Cook*, 86 U.S. (19 Wall.) 591, 593 (1873). Consequently, a later United States patent of the same lands was invalid.

Beecher v. Wetherby did not, however, have to do with submerged lands or the equal footing doctrine. The statutes and cases that do deal with these matters are described in the text.

the United States has chosen to disable leases and other permissions for private exploration and exploitation of the area and [to] have no bearing on the degree of the title remaining in the United States." Tr. 2434. The United States reasons that the paragraph should be given the same interpretation for submerged lands as for the uplands. *Id.* It notes also that section 11(b) of the Statehood Act refers to the Reserve not in terms of oil and gas rights but as "land . . . owned by the United States" and as subject to exclusive legislative jurisdiction of the United States.

Although Alaska's argument appears plausible on first examination, I believe its interpretation of the rights retained by the United States would be contrary to the policies expressed in both the Statehood Act and the Submerged Lands Act. The Submerged Lands Act, made applicable to Alaska by section 6(m) of the Statehood Act, contemplates that mineral rights are not to be separated from the fee. The Submerged Lands Act defines "natural resources" to include oil and gas. § 2(e), 43 U.S.C. § 1301(e). It then states in section 3:

(a) It is hereby determined and declared to be in the public interest that (1) title to and ownership of *the lands beneath navigable waters* within the boundaries of the respective States, *and the natural resources within such lands and waters*, and (2) the right and power to manage, administer, lease, develop, and use *the said lands and natural resources* . . . be, and they are hereby, subject to the provisions hereof, recognized, confirmed, established, and vested in and assigned to the respective States

(b) (1) The United States hereby releases and relinquishes unto said States . . . , except as otherwise reserved herein, all right, title, and interest of the United States, if any it has, in and to *all said lands, improvements, and natural resources*

§ 3, 43 U.S.C. § 1311 (emphasis added). Thus the Act treats lands and their natural resources together, unless some separation results from the phrase "except as otherwise reserved herein." The exceptions are covered by section 5 of the Act:

There is excepted from the operation of section 3 of this Act—

(a) all tracts or parcels of land together with all accretions thereto, resources therein, or improvements thereon, title to which has been lawfully and expressly acquired by the United States from any State . . . ; all lands expressly retained by . . . the United States when the State entered the Union

§ 5, 43 U.S.C. § 1313. To hold that the United States retained only oil and gas rights in submerged lands in the Reserve, it would be necessary to read "lands expressly retained" as covering the oil and gas rights but not the lands themselves. This would be a surprising interpretation, at best.

The same result follows from section 6(i) of the Alaska Statehood Act, which provides: "All grants made or confirmed under this Act shall include mineral deposits. . . ." Transfers of submerged lands to Alaska at statehood are surely "grants made or confirmed" under section 6(m) of the Statehood Act.⁸⁴ In effect Alaska is claiming lands without the oil and gas deposits, contrary to section 6(i). Although

⁸⁴ Alaska's equal footing rights, being constitutional in stature, would no doubt exist whether or not the Statehood Act confirmed them. If the Statehood Act did not confirm them, however, there would be difficulties with the constitutionality of Statehood Act sections 4 and 5. By section 4 (together with the Alaska Constitution, art. XII, § 12), Alaska disclaims all United States property "not granted or confirmed to the State . . . by or under the authority of this Act" By section 5, the United States retains title to all its property not dealt with otherwise in section 6. See *supra* page 431.

section 6(i) was no doubt included in the Statehood Act for Alaska's benefit, it does not become inapplicable merely because it happens to work to Alaska's detriment in this instance.

Alaska's remaining claim must be that equal footing requires a splitting of the ownership of submerged lands, notwithstanding any statutory provisions to the contrary. I do not find support in the cases for this position. In *Utah*, both the majority and the dissent assumed that either the United States had retained full rights to the bed of Utah Lake or the lake bed had passed to the State. On Alaska's analysis there would have been a third possibility: that the United States had retained the rights to the lake bed only so far as they were implicated in its use as a reservoir. The dispute in *Utah* arose when the United States issued oil and gas leases on the lake, but neither opinion suggested that the oil and gas rights might have passed to the State even if the United States had retained the lake bed for reservoir purposes.⁸⁵ Nor was it suggested that a post-statehood revocation of a reservation might in itself change the rights of the parties.⁸⁶

⁸⁵ In the court of appeals, Utah argued that the 1888 Act authorized withdrawal of only the surface estate in the bed of Utah Lake and that the mineral estate, if not reserved or withdrawn, passed to Utah at statehood. The Tenth Circuit rejected this interpretation of the 1888 Act, and it found no distinction between the surface and mineral estates in subsequent documents. *Utah v. United States*, 780 F.2d 1515, 1523 (10th Cir. 1985), *rev'd on other grounds sub nom. Utah Div. of State Lands v. United States*, 482 U.S. 193 (1987).

⁸⁶ Justice White, who would have held that the United States retained title to the lake bed at Utah's statehood, said: "[I]f Congress later determines that the lands are no longer needed by the Federal Government for a public purpose, it can at that time transfer title to the State." 482 U.S. at 210.

The Solicitor of the Interior has also taken the position that, when a withdrawal of submerged lands is revoked after statehood, title does not thereupon vest in the state. The Solicitor relied on section 5(a) of the

Instead, the Court adjusted conflicting state and federal interests by introducing the new requirement of a showing that a federal reservation of submerged lands was affirmatively intended to defeat the future state's title. This adjustment has the advantage, over a splitting of rights, of not raising new questions for the courts regarding regulatory authority, rights of use and occupancy, and whether the time for revocation has come.

I therefore find that the United States has retained full ownership, and not merely the oil and gas rights, in the submerged lands of the Reserve.

F. Conclusion

I conclude that lands under tidally influenced waters inside the boundary of the National Petroleum Reserve—Alaska are part of the Reserve and so belong to the United States. To the extent that these lands underlie inland waters, I found above that the circumstances of the Reserve were sufficient to overcome the strong presumption, as spelled out in *Montana* and *Utah*, that title passed to Alaska at statehood. To the extent that the lands underlie territorial waters, I found that the presumption of *Montana* and *Utah* does not apply. As to these lands, the result therefore follows a fortiori.

The following comments relate this conclusion to my findings regarding the Reserve boundary.

a. Question 7. Harrison Bay and Smith Bay are not part of the National Petroleum Reserve—Alaska, *see supra* page 352, and so are not affected by the conclusion.

b. Question 8. Peard Bay is inside the boundary of the

Submerged Lands Act, excepting from transfer "all lands expressly retained by . . . the United States when the State entered the Union" Solicitor's Opinion, 86 Interior Dec. 151, 174 (1978) (Solicitor's emphasis), *supplemented and modified*, 100 Interior Dec. 103 (1992) (addressing the question in terms of intent to defeat state title).

Reserve, *see supra* page 364, and therefore is part of the Reserve.

c. Question 11. Many, if not all, of the inlets, bays, and river estuaries disputed in question 11 are inside the Reserve boundary. *See supra* pages 380-81. To the extent that these areas are inside the boundary, they are also part of the Reserve.

d. Other tidally influenced waters, such as Elson Lagoon and Kasegaluk Lagoon, are concededly inside the Reserve boundary. *See supra* page 366. These areas are also part of the Reserve.

IX

THE ARCTIC NATIONAL WILDLIFE REFUGE

In November 1957, for the purpose of establishing an Arctic Wildlife Range, the Bureau of Sport Fisheries and Wildlife applied to the Secretary of the Interior for an order withdrawing a large area of public lands in the northeastern corner of Alaska.¹ Notice of the application was published

¹ The application, dated November 18, 1957, was as follows:

To: Secretary of the Interior

Through: Manager, Land Office
Bureau of Land Management
Fairbanks, Alaska

From: Director, Bureau of Sport Fisheries and Wildlife

Subject: Application for withdrawal by public land order

In accordance with the provisions of Departmental Circular No. 1982 of August 12, 1957 (43 CFR 295.9-295.15), application is made for the withdrawal of the public lands in Alaska described in the attachment marked "Exhibit A." The withdrawal should be made subject to the provisions of existing withdrawals and to valid existing rights in and to the lands described.

The agency applying for this withdrawal is the Bureau of Sport Fisheries and Wildlife, Department of the Interior.

The purpose of this withdrawal is to establish an Arctic Wildlife Range within all or such portion of the described lands as may be finally determined to be necessary for the preservation of the wildlife and wilderness resources of that region of northeastern Alaska.

A statement of the justification for the proposed withdrawal and the need for all the land requested is contained in the attached copy of a memorandum of November 7, 1957, from this bureau to the Director of the Bureau of Land Management.

It is desired that the withdrawal preclude all forms of appropriation under the public land laws. Mineral leasing will be permitted on and after September 1, 1958, in accordance with such regulations as on that date govern oil and gas leasing on Federal wildlife lands. Mining locations should be precluded until on and after September 1, 1958.

The hunting and taking of game animals and game birds and the

in the *Federal Register* in January 1958. 23 Fed. Reg. 364 (1958).²

At the time of the application, Alaska was still a territory. The Alaska Statehood Act was passed in July 1958, and a presidential proclamation admitting Alaska to the Union followed in January 1959. Alaska Statehood Act, Pub. L. No. 85-508, 72 Stat. 339 (1958), *reprinted as amended* in 48 U.S.C. note preceding § 21 (1988); Proclamation No. 3269,

trapping of fur animals will be permitted in accordance with the regulations of the Secretary of the Interior prescribed and issued pursuant to the provisions of the Alaska Game Laws, as amended.

This withdrawal should be made under the inherent authority of the President, delegated to the Secretary of the Interior by Executive Order No. 10355.

U.S. Ex. 9, Ak. Ex. 81.

² The notice read:

ALASKA
NOTICE OF PROPOSED WITHDRAWAL
AND RESERVATION OF LANDS

January 14, 1958.

Bureau of Sport Fisheries and Wildlife has filed an application, Serial No. Fairbanks 017050, for the withdrawal of the land described below, from all forms of appropriation under the public land laws. Mineral leasing will be permitted on and after September 1, 1958, in accordance with such regulations as on that date govern oil and gas leasing on Federal wildlife lands. Mining locations will be precluded until on and after September 1, 1958.

The hunting and taking of game animals and game birds and the trapping of fur animals will be permitted in accordance with the regulations of the Secretary of the Interior prescribed and issued pursuant to the provisions of the Alaska Game Laws, as amended.

The applicant desires the land for an Arctic Wildlife Range for the preservation of the wildlife and wilderness resources of northeastern Alaska.

For a period of 60 days from the date of publication of this notice, persons having cause may present their objections in writing to the

3 C.F.R. 4 (1959-1963), *reprinted* in 48 U.S.C. note preceding § 21, at 15 (1988).

At Alaska's statehood the application for withdrawal was still pending before the Secretary of the Interior. Nearly two years after statehood, in December 1960, the Secretary issued Public Land Order 2214, withdrawing the lands and establishing the Arctic National Wildlife Range. 25 Fed.

undersigned official of the Bureau of Land Management, Department of the Interior, Box 480, Anchorage Alaska.

If circumstances warrant it, a public hearing will be held at a convenient time and place, which will be announced.

The determination of the Secretary on the application will be published in the Federal Register. A separate notice will be sent to each interested party of record.

The lands involved in the application are:

Beginning at the Intersection of the International Boundary line between Alaska and Yukon Territory, Canada, with the line of extreme low water of the Arctic Ocean in the vicinity of Monument 1 of said International Boundary line;

Thence westerly along the said line of extreme low water, including all offshore bars, reefs, and islands to a point of land on the Arctic Seacoast known as Brownlow Point, at approximate longitude 145°51' W. and latitude 70°10' N.;

Thence in a southwesterly direction approximately three (3) miles to the mean high water mark of the extreme west bank of the Canning River;

Thence southerly up the said west bank of the Canning River along the mean high water mark

.....
Thence north with the said International Boundary line approximately one hundred (100) miles to the point of beginning.

Containing approximately 6,400,000 acres.

L. T. MAIN,
Operations Supervisor, Anchorage.

23 Fed. Reg. 364 (1958).

Reg. 12,598 (1960).³ So far as relevant, the lands described in the application and in the public land order are the same.⁴ The northern part of the Range, which extends from the Canadian boundary on the east to Brownlow Point and the Canning River on the west, is shown in figures 1.1, 9.1, and 9.2.

³ Public Land Order 2214, 25 Fed. Reg. 12,598, provides:

ALASKA

Establishing the Arctic National Wildlife Range

By virtue of the authority vested in the President, and pursuant to Executive Order No. 10355 of May 26, 1952, it is ordered as follows:

1. For the purpose of preserving unique wildlife, wilderness and recreational values, all of the hereinafter described area in northeastern Alaska, containing approximately 8,900,000 acres is hereby, subject to valid existing rights, and the provisions of any existing withdrawals, withdrawn from all forms of appropriation under the public land laws, including the mining but not the mineral leasing laws, nor disposals of materials under the Act of July 31, 1947 (61 Stat. 681; 30 U.S.C. 601-604), as amended, and reserved for use of the United States Fish and Wildlife Service as the Arctic National Wildlife Range;

... [boundary description as in the 1958 notice, *supra* note 2]

2. The Secretary of the Interior is authorized to permit the hunting and the taking of game animals, birds, and fish in the wildlife range, or parts thereof, as well as the trapping of fur animals. However, no person may hunt, trap, capture, kill, or willfully disturb any wild mammal, wild bird, or fish or take or destroy the eggs or nests of any such bird or fish within the wildlife range, except as may be prescribed by the Secretary. The provisions of State law shall govern all hunting and taking of wildlife which the Secretary of the Interior permits under the terms of this order.

FRED A. SEATON,
Secretary of the Interior.

December 6, 1960.

⁴ Although the estimated area of the Range was changed from 6.4 million acres in the notice of application to 8.9 million acres in the public land order, *see supra* notes 2-3, the lower figure was simply a mistake. Tr. 56-58; U.S. Exs. 16, 17; U.S. Ex. 24, at 1-2. The boundary descriptions in the two documents are identical except for trivial stylistic differ-

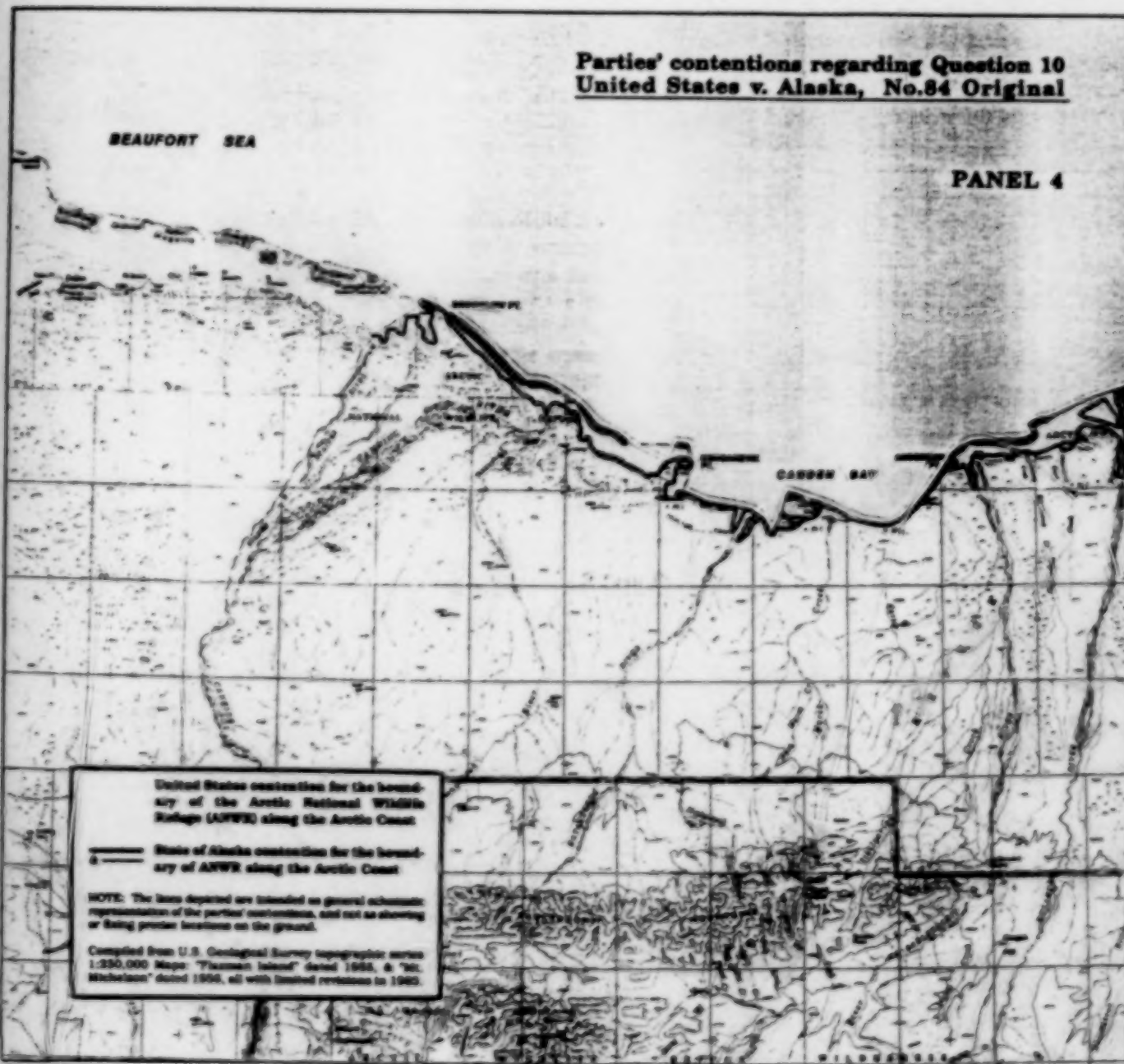


Figure 9.1

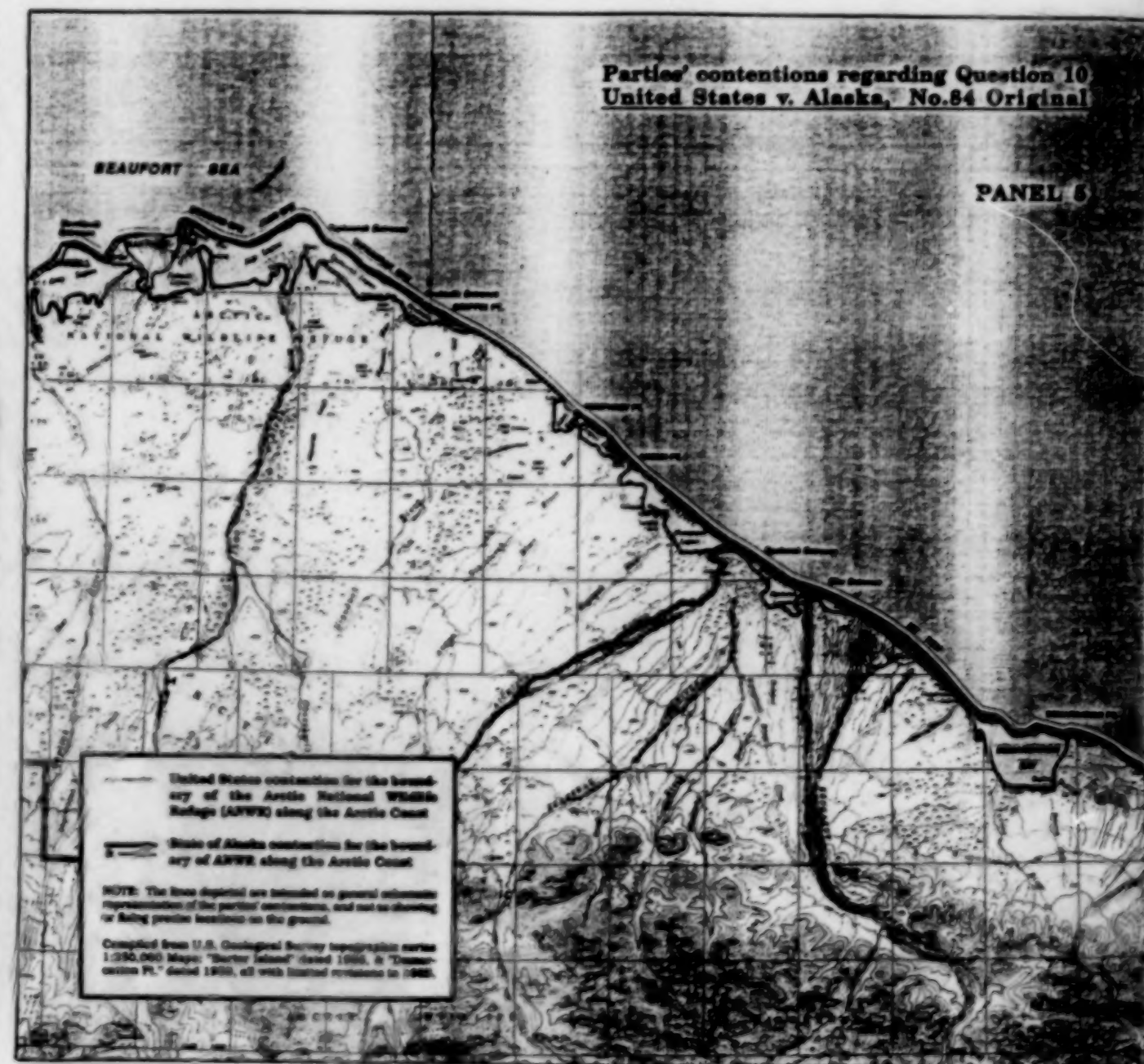


Figure 9.2

The name of the Range was changed to "Arctic National Wildlife Refuge" in 1980.⁵

A. The issues

The parties agree that the upland parts of the Arctic National Wildlife Range remained in federal ownership after Alaska's statehood. The disagreement concerns lands under navigable waters, which would otherwise have passed to Alaska at its admission to the Union. *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845) (inland navigable waters); Submerged Lands Act, 43 U.S.C. §§ 1301-1315 (1988) (navigable waters within three miles of a state's coastline). See generally section II, *supra*. In particular, the dispute before the Master concerns lands under tidally influenced waters, that is, lands at the north of the Range such as lagoons, tidelands, and river mouths.⁶ The Range boundary in these areas

ences and the apparent correction of a typographical error at one place along the inland boundary.

⁵ Alaska National Interest Lands Conservation Act, Pub. L. No. 96-487, § 303(2)(A), 94 Stat. 2371, 2390 (1980). In that Act Congress avoided taking a position on the present issues:

The Arctic National Wildlife Refuge shall consist of the existing Arctic National Wildlife Range including lands, waters, interests, and whatever submerged lands, if any, were retained in Federal ownership at the time of statehood and an addition of approximately nine million one hundred and sixty thousand acres of public lands, as generally depicted on a map entitled "Arctic National Wildlife Refuge", dated August 1980.

Id.

⁶ Because of facts specific to the Range, it will sometimes be appropriate in this part of the report to distinguish between tidelands and lands that are permanently submerged. Where the context does not call for such a distinction, phrases like "submerged lands" or "lands beneath tidally influenced waters" may be used to include both periodically and permanently submerged lands.

is defined in part as following the "line of extreme low water, including all offshore bars, reefs, and islands." In addition, the dispute is limited to the actions creating the Arctic National Wildlife Range; it does not concern any other withdrawals that may have covered some of the same lands.⁷

In their Joint Statement the parties submitted two questions concerning the lands. The United States will prevail only if both questions are answered in its favor.

Question 9 goes to the effectiveness of the application for withdrawal:

Did the application for withdrawal and creation of the Arctic Wildlife Range, filed in 1958 but not finally confirmed until 1960, effectively withhold from Alaska any offshore submerged lands included within the application?

Alaska argues that a mere application was insufficient. It also has argued that even a prestatehood public land order would have been insufficient to withhold the contested lands from the State. The United States, arguing that the application was effective to withhold submerged lands from Alaska, relies in part on an Interior Department regulation in force at the time of the application. According to this regulation, the application itself was enough to set the lands apart.⁸ The

⁷ For example, the Master has not been asked to consider the effect of Public Land Order 82, which in 1943 withdrew an overlapping area for use in connection with the prosecution of World War II. Public Land Order 82, 8 Fed. Reg. 1599 (1943), *revoked by* Public Land Order 2215, 25 Fed. Reg. 12,599 (1960). The Interior Department has interpreted Public Land Order 82 as not withdrawing offshore submerged lands. 86 Interior Dec. 151, 152 n.1, 175 (1978), *modified and supplemented in other respects*, 100 Interior Dec. 103 (1992).

⁸ The regulation provided:

§ 295.11 *Segregative effect of applications.* (a) The noting of the receipt of the application in the tract books or on the official plats maintained by the Land Office in which the application was properly

United States relies also on certain provisions of the Submerged Lands Act and the Alaska Statehood Act.

Question 10 goes to the interpretation of the application for withdrawal:

Assuming the acreage included in the 1958 application for the Arctic Wildlife Range was effectively withheld from Alaska, does the Range embrace the submerged lands between the mainland and the barrier islands in the area between the Canadian boundary and Brownlow Point?

Alaska contends that the language defining the Range boundary does not include the submerged lands between the mainland and the islands. It also contends that the boundary language excludes part of the beds of navigable rivers from the Range. The United States contends that the Range boundary runs along the seaward side of the barrier islands.

Questions 9 and 10 were heard, briefed, and argued along with the National Petroleum Reserve issues already discussed. *See supra* section VIII at 346-48. After the questions had been heard and briefed, the Court decided *Montana v. United States*, 450 U.S. 544 (1981). The *Montana* decision said that there is a strong presumption that lands under navigable waters pass to a new state when it enters the

filed . . . shall temporarily segregate such lands from settlement, location, sale, selection, entry, lease, and other forms of disposal under the public land laws, including the mining and the mineral leasing laws, to the extent that the withdrawal or reservation applied for, if effected, would prevent such forms of disposal. To that extent, action on all prior applications the allowance of which is discretionary, and on all subsequent applications, respecting such lands will be suspended until final action on the application for withdrawal or reservation has been taken. Such temporary segregation shall not affect the administrative jurisdiction over the segregated lands.

22 Fed. Reg. 6613, 6614 (Aug. 17, 1957); 43 C.F.R. § 295.11(a) (1954, Supp. 1962) (Ak. Ex. 77).

Union. It held that the bed of the Big Horn River passed to Montana at statehood even though it was inside the boundary of an Indian reservation created earlier. *See supra* section VIII(D)(2).

Montana prompted a joint motion by the parties for supplemental briefs. Joint Motion (Oct. 31, 1983); Stipulation of the Parties (Nov. 2, 1983). In response, the Master issued an order permitting briefs on the relevance of *Montana* "to the question of ownership of submerged lands underlying tidal lagoons within the exterior boundaries of the Arctic National Wildlife Range, if any, and within the exterior boundaries of the National Petroleum Reserve-Alaska." Order of Jan. 4, 1984. At oral argument, which followed the *Montana* briefing, the parties agreed that they wished the Master to consider all tidally influenced water bodies inside the boundary, not merely tidal lagoons. Tr. 2431-32, 2477. Accordingly, question 10 now covers two issues: the location of the boundary (the original question) and the rights to lands under tidally influenced waters inside the boundary (the *Montana* question).

In their *Montana* briefs, the parties also expanded on their argument of question 9. Alaska read *Montana* as supporting its view that even a secretarial order of withdrawal issued before statehood would not have kept submerged lands from the State; a fortiori the application for withdrawal did not do so. The United States replied that *Montana* supported no such reading.

The Court handed down another pertinent decision in *Utah Division of State Lands v. United States*, 482 U.S. 193 (1987). There, the Court left open a question previously raised by Alaska: whether the Federal Government has the power, when a state enters the Union, to keep lands under navigable waters for itself. Assuming *arguendo* that the power existed, the Court said that two showings would have to be made to establish such a retention: a clear intent to

include the submerged lands within the reservation and an affirmative intent to defeat the future state's title to the lands. On the facts of the case, the Court found that the Federal Government had not retained the bed of Utah Lake at Utah's statehood. *See supra* section VIII(D)(2).

A second supplemental briefing followed the decision in *Utah*. The arguments in the *Utah* briefs, like those in the *Montana* briefs, bear on both questions 9 and 10.⁹

B. Question 9: The effectiveness of the withdrawal application

As indicated above, the arguments on question 9 are at two levels. At one level, it is assumed that a completed withdrawal and reservation of submerged lands before Alaska's statehood would have prevented the passage of those lands to the State. The question is then whether an application for withdrawal has enough in common with a completed withdrawal that it has the same effect.

At the other level, Alaska argues that the assumption is incorrect. On Alaska's view, the lands in controversy would have passed to Alaska at statehood even if a public land order creating the Range had already been issued and even if the order were clearly intended to include submerged lands. I begin with this second argument.

1. Federal power to retain submerged lands

Alaska's position regarding the power of the United States over submerged lands is founded on the equal footing doctrine. This doctrine, first announced in *Pollard v. Hagan*, 44 U.S. (3 How.) 212 (1845), says that a new state, on admission to the Union, receives title to land beneath navigable waters within its boundaries.

⁹ For the abbreviations used for the three sets of briefs, *see supra* section VIII at 348 n.5.

I have already examined the development and scope of the equal footing doctrine at length, and I have treated the parties' arguments on that subject in detail. See *supra* section VIII(D)–(E)(2). It suffices here to summarize the conclusions:

1. There is a distinction between lands under navigable inland waters and lands under territorial waters within state boundaries. A state's equal footing rights extend only to the former. For lands under territorial waters, the states' rights are based on the Submerged Lands Act but not the equal footing doctrine. Section VIII(E)(1), *supra*.

2. During the territorial period, Congress can convey lands under navigable waters to a third party and thereby defeat the title of an eventual state. This power arises from the Property Clause of the Constitution (art. IV, § 3, cl. 2), which permits Congress "to dispose of and make all needful Rules and Regulations respecting the Territory or other Property belonging to the United States." The power is limited by the requirement that the conveyance be for a "public purpos[e] appropriate to the objects for which the United States hold[s] the Territory." Section VIII(E)(2), *supra*, at 397 (quoting *Utah Div. of State Lands v. United States*, 482 U.S. 193, 200–01 (1987), and *Shively v. Bowlby*, 152 U.S. 1, 48 (1894)).

3. During the territorial period, Congress can also reserve lands under navigable waters to the United States for an appropriate public purpose and can thereby defeat the title of an eventual state. Section VIII(E)(2), *supra*.

4. Although Congress thus has the power to prevent lands under inland navigable waters from passing to a new state, the exercise of the power is not to be lightly inferred. *Utah*, 482 U.S. at 197. For lands under territorial waters, in contrast, the applicable presumption is in favor of the United States. Section VIII(E)(1), *supra*.

A further issue is how the congressional power over sub-

merged lands in a territory may be exercised. Alaska has argued that only Congress itself can accomplish a federal withholding of submerged lands. I have found, however, that at least some aspects of congressional authority may be delegated. Section VIII(E)(3), *supra*, at 404–06. Accordingly, two questions arise. Did Congress itself act to withhold lands beneath navigable waters in the Arctic National Wildlife Range? If not, did the actions of the executive branch result in such a withholding? In section 2, I turn to the statutes that govern these questions. Then section 3 will take up considerations applicable to either a congressional or an executive withholding; section 4 will ask whether there was a congressional withholding; and section 5, whether an executive withholding took place.

2. The statutory framework

While Alaska was a territory, the United States held the rights to whatever lands under navigable waters were covered by the application for the Arctic Wildlife Range. When Congress authorized Alaskan statehood, it specified that in general "the United States shall retain title to all property, real and personal, to which it has title, including public lands." Alaska Statehood Act, Pub. L. No. 85-508, § 5, 72 Stat. 339, 340 (1958), *reprinted in* 48 U.S.C. note preceding § 21 (1988). Congress then provided several exceptions to this general rule.

The exceptions relevant here are sections 6(e) and 6(m) of the Alaska Statehood Act. Each of these sections is itself subject to exceptions.

Section 6(e) of the Statehood Act deals with fish and wildlife resources. The United States reads a proviso to this section as action by Congress itself to retain whatever submerged lands were included in the application for the Range. I shall return to section 6(e) shortly.

Section 6(m) of the Statehood Act deals with submerged lands. It provides:

The Submerged Lands Act of 1953 shall be applicable to the State of Alaska and the said State shall have the same rights as do existing States thereunder.

The Submerged Lands Act, in turn, says that "title to and ownership of the lands beneath navigable waters within the boundaries of the respective States" are "recognized, confirmed, established, and vested in and assigned to the respective States." § 3(a), 43 U.S.C. § 1311(a). It is by means of the Submerged Lands Act that the Statehood Act provides for the transfer of lands under navigable waters, inland or territorial, to the new state.

Section 5 of the Submerged Lands Act, however, excepts from transfer to a state:

all lands expressly retained by or ceded to the United States when the State entered the Union (otherwise than by a general retention or cession of lands underlying the marginal sea)

§ 5(a), 43 U.S.C. 1313(a). Thus, any submerged lands covered by the application for the Arctic Wildlife Range might have been "expressly retained by" the United States when Alaska entered the Union.

The Submerged Lands Act does not say what branches of the Federal Government are competent to "expressly retain" submerged lands. Certainly Congress could retain them, and it is argued to have done so in the fish and wildlife section of the Statehood Act, section 6(e). An additional possibility is that executive action could amount to an express retention. Insofar as the Submerged Lands Act may countenance an executive retention of submerged lands, it provides a second possible basis for finding that such lands were withheld from Alaska.

3. General considerations

Certain facts about the Range are important to either theory of how submerged lands might have been retained at Alaska's statehood. Central is a regulation of the Department of the Interior that was in effect at the time of the application. 43 C.F.R. § 295.11(a), 22 Fed. Reg. 6613, 6614 (1957), quoted *supra* note 8. Under the regulation, noting of receipt of the application in the Land Office tract books temporarily segregated the lands from disposal under the public land laws to the same extent that the withdrawal or reservation applied for would have done. In the case of the Wildlife Range, the application was noted in the records of the Land Office at Fairbanks, Alaska, in November 1957, just after the application was filed. Tr. 53-55; U.S. Exs. 10, 11, 13, 85.¹⁰

The regulation thus gave some effect to the application for the Range. It did not amount to a granting of the application, which remained subject to the decision of the Secretary of the Interior and which was still pending before him at Alaska's statehood. One may therefore ask, under the United States' position, what would have become of any submerged lands covered by the application if the Secretary had rejected the application after statehood.

The United States has not addressed this question. Instead, it treats the question as unrealistic because, it observes, Secretary Seaton was in fact fully persuaded of the need for the Range.¹¹ Nevertheless, the Secretary's position

¹⁰ United States Exhibit 85 was mistakenly referred to as Exhibit 86 at Tr. 54.

¹¹ When the application was filed in November 1957, the Department issued a press release stating that the filing had been made at the Secretary's direction. U.S. Ex. 12 (Ak. Exs. 19, 57). The Secretary himself said that "after the application is handled in the usual manner . . . we intend to go forward with the establishment of this wildlife range." U.S. Ex. 32. Later (after statehood), the Secretary sent draft legislation to

was politically controversial.¹² He chose not to issue a public land order before Alaska's statehood, even though more than a year passed between the filing of the application in November 1957 and Alaska's admission in January 1959. Under these circumstances, the possibility of a poststatehood denial of the application cannot be simply dismissed.

Congress to create the Range by statute. U.S. Ex. 27 (Ak. Exs. 11, 56). (The object of this legislation was to permit mining in the Range on terms that existing law did not authorize the Secretary to impose.) When Congress failed to enact a bill, the Secretary established the Range by public land order and announced in a press release:

From time to time . . . he has stated that in the event the Congress was either unable or unwilling to act both to preserve in protected status the resource values in that area and to authorize limited mining and mineral leasing activity in a form and manner compatible with the basic purpose of the withdrawal, he would have to consider taking administrative action to create the new Range.

U.S. Ex. 34 (Ak. Exs. 13, 61).

¹² The Federal Register announcement of the application drew significant opposition within Alaska. The Fairbanks Bureau of Land Management, in a report dated April 11, 1958, indicated that it had received 57 communications about the Range, only three of which supported it. Ak. Ex. 20; U.S. Ex. 24. The Bureau itself argued that the Wildlife Range might hamper mineral development and that the region's remoteness, together with the Alaska game laws, would provide adequate wildlife protection. *Id.*

Shortly after statehood, the new Alaska legislature adopted a memorial expressing its opposition to the creation of the refuge. House Joint Memorial 23, 1959 Session Laws 434 (Mar. 17, 1959); see U.S. Ex. 36. Governor Egan wrote to Interior in opposition in both May and July 1959. Ak. Exs. 53, 55.

The administration bill, *supra* note 11, was introduced in Congress in 1959. In the House of Representatives, it was given a one-day hearing, reported without amendment, and passed without opposition. *Miscellaneous Fish and Wildlife Legislation: Hearings Before the Subcomm. on Fisheries and Wildlife Conservation of the House Comm. on Merchant Marine and Fisheries*, 86th Cong., 1st Sess. 137-82 (1959); H.R. Rep. No. 771, 86th Cong., 1st Sess. (1959) (U.S. Ex. 28); 106 Cong. Rec. 2516

Assuming that the application covered some submerged lands, I am aware of no provision of law that would cause the lands to pass to Alaska upon denial of the application after statehood. The application and the regulation together would thus have accomplished a federal withholding of submerged lands from Alaska. Yet denial of the application would imply that there was no real need for the withholding or at least that any need was outweighed by other factors.

A congressional policy, found by the Court in a long line of cases, is that lands under navigable inland waters, "unless in case of some international duty or public exigency, shall be held by the United States in trust for the future States" *Shively v. Bowlby*, 152 U.S. 1, 50 (1894). *Accord*, *United States v. Holt State Bank*, 270 U.S. 49, 55 (1926); *Montana v. United States*, 450 U.S. 544, 552 (1981); *Utah Division of State Lands v. United States*, 482 U.S. 193, 197 (1987). See generally sections VIII(D) and (E)(4)(a), *supra*. Some of the lands at issue here clearly fall within the scope of this policy.¹³ It would violate the policy to hold that the application for the Wildlife Range kept such lands from Alaska at statehood even though the Secretary of the Interior might later determine that the lands were not needed.

It has been suggested that, if the application were denied,

(1960); H.R. 7045, 86th Cong., 2d Sess. (1960) (as passed House, U.S. Ex. 33). In the Senate, however, the Commerce Committee held eleven days of hearings in Washington and Alaska and did not report a bill. *Arctic Wildlife Range—Alaska: Hearings on S. 1899 Before the Merchant Marine and Fisheries Subcomm. of the Senate Comm. on Interstate and Foreign Commerce*, 86th Cong., 1st & 2d Sess., pts. I & II (1959-60).

¹³ Since the seaward boundary of the Range uses a line of extreme low water, tidelands are necessarily inside the boundary. Depending on the location of the boundary (question 10, *infra*), other inland waters inside the boundary may include the tidally influenced parts of rivers and any areas that qualify as juridical bays. I have found in section III, however, that the disputed areas are not inland waters merely because they are landward of barrier islands.

Alaska could have obtained title to the lands after statehood by selecting them under the Alaska Statehood Act. Solicitor's Opinion, 86 Interior Dec. 151, 176 (1978). *See also* 100 Interior Dec. 103, 118 n.43 (1992) (supplementing the 1978 opinion). Section 6(b) of the Statehood Act provides that Alaska "is hereby granted and shall be entitled to select" up to 102,550,000 acres of public lands. Nevertheless, such selections are subject to restrictions not applicable to the State's entitlement under the Submerged Lands Act and the equal footing doctrine.¹⁴

I therefore approach the Alaska Statehood Act and the Submerged Lands Act with some skepticism as to their support for the effectiveness of the application.

4. Congressional retention by Statehood Act § 6(e)

The United States argues that, by section 6(e) of the Alaska Statehood Act, Congress acted to retain whatever lands were covered by the application for the Arctic Wildlife Range. In particular, the United States relies on the italicized proviso:

All real and personal property of the United States situated in the Territory of Alaska which is specifically used for the sole purpose of conservation and protection of the fisheries and wildlife of Alaska, under the provisions of the Alaska game law of July 1, 1943 (57 Stat. 301; 48 U.S.C., Secs. 192-211), as amended, and under the provisions of the Alaska commercial fisheries laws of June 26, 1906 (34 Stat. 478; 48 U.S.C., secs. 230-239 and 241-242), and June 6, 1924 (43 Stat. 465; 48 U.S.C., secs. 221-228), as supplemented and amended, shall be trans-

¹⁴ Tracts selected must meet requirements of compactness and minimum size; they are chargeable against the total acreage available for selection; and, for lands in the northernmost part of Alaska, selections must have presidential approval. Alaska Statehood Act § 6(b), (g).

ferred and conveyed to the State of Alaska by the appropriate Federal agency: . . . *Provided, That such transfer shall not include lands withdrawn or otherwise set apart as refuges or reservations for the protection of wildlife nor facilities used in connection therewith, or in connection with general research activities relating to fisheries or wildlife. . . .*

Alaska Statehood Act, Pub. L. No. 85-508, § 6(e), 72 Stat. 339, 340 (1958), *reprinted as amended in* 48 U.S.C. note preceding § 21 (1988) (emphasis added).

It is not contended that the Range qualified at statehood as "lands withdrawn . . . as refuges or reservations for the protection of wildlife." The application for withdrawal was pending at statehood in January 1959, but it was not acted on until December 1960. The United States does contend, because of the regulation segregating the lands applied for, that the Range qualified at statehood as lands "otherwise set apart" within the meaning of section 6(e).

Alaska makes several responses to this contention:

1. That the departmental regulation was not intended to operate on submerged lands. Thus, even if the application for withdrawal covered submerged lands, they were not segregated by the regulation and so were not "otherwise set apart" within the meaning of section 6(e).

2. That, even if the regulation did reach submerged lands as well as uplands so that the lands were "otherwise set apart," they were not "otherwise set apart as refuges or reservations for the protection of wildlife."

3. That, even if the lands were "otherwise set apart as refuges or reservations for the protection of wildlife," the structure of the Statehood Act shows the proviso was not intended to prevent submerged lands from passing to the State.¹⁵

¹⁵ Alaska has also argued, citing hearings on legislation contemporaneous with the Statehood Act, that there is positive evidence that Con-

I find Alaska's second point controlling. The proviso to section 6(e) covers lands "withdrawn or otherwise set apart as refuges or reservations for the protection of wildlife." Although the application and the regulation together caused land to be set apart for the purpose of a wildlife reservation, it was not yet set apart *as* a refuge or reservation. It may be that the temporary segregation had essentially the same effect as a withdrawal of lands, in that both prevented disposition under the public land laws. But the segregation did not have the same effect as a reservation of lands, dedicating them to a specific public purpose.¹⁶ As the regulation itself states, the application did not affect administrative jurisdiction over the lands. *See supra* note 8. It was not until the Secretary approved the application after statehood that the Wildlife Range was established and jurisdiction was transferred from the Bureau of Land Management to the Fish and Wildlife Service.

The proviso to section 6(e), taken literally, thus applies only to wildlife refuges or reservations already established at statehood. One might still question whether this reading is the best one, since the words "otherwise set apart" do describe the effect of an application under the regulation.

The answer is that the history of the proviso shows no reason to reject its literal meaning. At the time the proviso was drafted, the regulation relied on by the United States did not yet exist. The proviso was first proposed by the Department of the Interior, in precisely its present form, in 1950. S. Rep. No. 1929, 81st Cong., 2d Sess. 12, 14 (1950).¹⁷ The

gress intended submerged lands in wildlife refuges to become Alaska's. As discussed earlier, I believe that Alaska misinterprets the cited testimony. Section VIII, *supra*, at 436 n.75.

¹⁶ For the terminology of withdrawals and reservations, *see supra* section VIII at 395 n.40.

¹⁷ Alaska statehood legislation was considered at every session of Congress from 1947 up until its enactment in 1958. For a partial bibliog-

Department's regulations providing for the segregative effect of an application for withdrawal were first promulgated in 1952. 17 Fed. Reg. 7368, 7677 (1952); 43 C.F.R. §§ 295.9-

raphy, *see* H. Rep. No. 624, 85th Cong., 1st Sess. 89-90 (1957), *reprinted in* 1958 U.S.C. Cong. & Admin. News 2933, 3005-07.

The proviso to what became section 6(e) was proposed in a letter of April 20, 1950, from Interior Secretary Oscar L. Chapman to Senator O'Mahoney, chairman of the Committee on Interior and Insular Affairs. The text of the letter included the following:

For the purpose of bringing about a division of the fish and wildlife activities now conducted by the United States in Alaska, along lines of demarcation conforming to the recognized distinctions between Federal and State functions, I recommend adoption of the following amendment to section 5 of the bill:

On page 9, lines 1 to 9, strike out the following:

"All the property of the United States situated in the Territory of Alaska used in connection with the conservation and protection of the fisheries and of the fur and game of Alaska is hereby transferred and conveyed to the State of Alaska. The State of Alaska shall possess and exercise the same jurisdiction and control over the fisheries and the fur and game of Alaska as are possessed and exercised by the several States within their respective territorial limits, including adjacent waters."

and insert in lieu thereof the following:

"All real and personal property of the United States situated in the Territory of Alaska which is used in connection with the conservation and protection of the fisheries and wildlife of Alaska, under the provisions of the Alaska game law of July 1, 1943 (57 Stat. 302; 48 U.S.C., secs. 192-211), as amended, and under the provisions of the Alaska commercial fisheries laws of June 26, 1906 (34 Stat. 478; 48 U.S.C., secs. 230-239 and 241-242), and June 6, 1924 (43 Stat. 465; 48 U.S.C., secs. 221-228), as supplemented and amended, is hereby transferred and conveyed to the State of Alaska: *Provided, That such transfer shall not include lands withdrawn or otherwise set apart as refuges or reservations for the protection of wildlife nor facilities utilized in connection therewith, or in connection with general research activities relating to fisheries or wildlife. The State of Alaska shall possess and exercise the same jurisdiction and control over the fisher-*

295.11 (Supp. 1953). Thus, the words "otherwise set apart" cannot have been intended originally to take in lands applied for but not yet withdrawn. Although members of Congress after 1952 might have considered the proviso broad enough to cover lands segregated by a withdrawal application, I have found little evidence in the legislative history that they considered that possibility.¹⁸

ies and the wildlife of Alaska, except fur seals and sea otters, as are possessed and exercised by the several States within their Territorial limits, including adjacent waters. . . ."

This proposed amendment would transfer to the State of Alaska the same jurisdiction and control over the fisheries and wildlife therein as are possessed and exercised by the existing States within their territorial limits and adjacent waters. Authority over matters affecting migratory birds would not be transferred, since this is a subject which is governed by Federal law throughout the Union. Similarly, authority over matters affecting fur seals and sea otters would be expressly excepted from the transfer to the proposed State. Both of these situations involve the discharge of international commitments undertaken by the United States through treaty or convention. Express mention of seal and sea otters is made in the amendment, because the habitat of these animals, unlike that of migratory birds, is largely confined to Alaska.

Under the language of the proposed amendment, the State of Alaska would obtain title to all real and personal property of the United States primarily used in the administration of the Alaska game law and the Alaska commercial fisheries laws. *On the other hand, the United States would retain administrative jurisdiction over the Pribilof Islands, and over all other Federal lands and waters in Alaska which have been set aside as wildlife refuges pursuant to the fur seal and sea otter laws, the migratory bird laws, or other Federal statutes of general application.* The United States would also retain general research facilities relating to fisheries or wildlife. . . .

S. Rep. No. 1929, 81st Cong., 2d Sess. 13-14 (1950) (emphasis added).

¹⁸ The Arctic Wildlife Range and several other proposed refuges were touched on briefly during later consideration of the Statehood Act. *Statehood for Alaska: Hearings on H.R. 50 and Other Bills Before the Sub-*

Reading section 6(e) together with the policy mentioned in section 3, *supra*, I conclude that Congress did not intend the proviso to defeat Alaska's title to submerged lands that were covered only by an application still requiring approval or disapproval by the Secretary.

5. *Executive retention under Submerged Lands Act* § 5(a)

The remaining question is whether the actions of the executive branch alone caused submerged lands to be withheld from Alaska. The answer depends on the Submerged Lands Act, made applicable to Alaska by section 6(m) of the Alaska Statehood Act. *See supra* page 458.

The Submerged Lands Act excepts from the submerged lands granted or confirmed to the states "all lands expressly retained by . . . the United States when the State entered the Union" § 5(a), 43 U.S.C. § 1313(a). The Act does not say "expressly retained by Congress." For present purposes, I assume that an executive withdrawal and reservation of lands, if undertaken with appropriate authority and appropriate intent, can qualify as an express retention.¹⁹ The following sections consider (1) whether an application can also qualify and (2) if so, whether the retention asserted in the present case was authorized.

a. *An application as an executive retention*

The legislative history of section 5(a) is not helpful as to whether an application for withdrawal and reservation

comm. on Territorial and Insular Affairs of the House Comm. on Interior and Insular Affairs, 85th Cong., 1st Sess. 482-84 (1957) (statement of C.R. Gutermuth, Vice President, Wildlife Management Institute); 104 Cong. Rec. 9410-11 (1958) (statement of Rep. Pelly).

¹⁹ This assumption is contrary to Alaska's position. *See* AB 42-44; ARB 8.

should be able to qualify as expressly retaining submerged lands. The language of section 5(a) was adopted as a committee amendment in the Senate, S. Rep. No. 133, 83d Cong., 1st Sess. 16 (1953), and was described as "self-explanatory," *id.* at 20. Debate on the Senate floor was focused on making clear that lands would not be considered expressly retained merely because of federal paramount rights to lands under the territorial sea or because of a general reservation of public lands in any act enabling statehood. 99 Cong. Rec. 2619, 4236 (1953).²⁰ The debate thus

²⁰ The debate contained the following exchange:

Mr. HOLLAND. . . .

I now wish to return to the earlier provision or exception, which relates to "All lands expressly retained by or ceded to the United States when the State entered the Union."

I am not disturbed by the phrase, "ceded to the United States," which I understand applies only in the case of Texas. . . . However, I am concerned with the fact that there have been included in the enabling acts, by which some of the newer States have been created, general reservations of public lands. There are expressions which may go even further than that.

Therefore, I am exceedingly anxious that in the explanation of this amendment it may be made abundantly clear by the Senator from Oregon that mere paramount rights and the existence of such rights to offshore areas and to sea bottoms would not in anywise satisfy this condition of express retention by the United States when the State entered the Union, if that is the fact.

Mr. CORDON. The purpose of the language is to reserve to the United States those facilities and those areas which are used by the Government in its governmental capacity for one or more of its governmental purposes.

The provision specifically saves to the United States that type of facility concerning which there never has been, in the history of this country, a question as to the Federal Government's right of ownership.

The sole purpose of the legislation proposed is to recreate the situ-

did not reach the question of what steps expressly dealing with submerged lands would suffice to retain them.

The Department of the Interior has taken different positions at different times on the effect of an application. In an opinion prepared in August 1959, seven months after statehood, Deputy Solicitor Edmund T. Fritz advised that a pre-statehood application for withdrawal of submerged lands did not prevent their passing to Alaska upon admission. Opinion M-36562 (Ak. Ex. 76). This opinion was overruled by Solicitor Leo Krulitz in 1978. 86 Interior Dec. 151 (1978) (Ak. Ex. 80).²¹

The 1959 opinion dealt with a situation parallel to the present one. In October 1958, notice had been published of an application for an addition to the Aleutian Islands National Wildlife Refuge. 23 Fed. Reg. 8163 (1958) (Ak. Ex. 74). The lands to be added were "all tidelands and all adjoining areas of water extending three miles beyond mean low water, adjacent to" the existing refuge. *Id.* The Secretary did not act on the application before statehood. After statehood, the Deputy Solicitor wrote that the Secretary could no longer grant the application because the lands had passed to Alaska under the Submerged Lands Act. As to the effect of the regulation segregating the lands, the opinion said:

[T]he segregation created by the notation of application 044920 on the record of the Anchorage office, was not equivalent to a Secretarial order withdrawing the lands,

ation in law as it existed in fact before the California, Louisiana, and Texas decisions and not to go beyond that point.

99 Cong. Rec. 2619 (1953).

²¹ In a 1992 supplement to the Krulitz opinion, 100 Interior Dec. 103 (1992), Solicitor Thomas L. Sansonetti did not take a position on the effect of an application. See note 22 *infra*.

although the notation segregated them from various types of disposals under the public land laws to the extent that the requested Secretarial withdrawal would have done if the withdrawal had been made. The segregation was merely to temporarily bar disposals under the public land laws until the Secretary had an opportunity to determine whether the withdrawal should be made or the application therefor denied The segregation did not transfer the areas covered by the application from the administrative jurisdiction of the Bureau of Land Management to that of the Bureau of Sport Fisheries and Wildlife.

Ak. Ex. 76, at 2.

The 1978 Solicitor's opinion, which overruled the 1959 one, dealt with the Arctic National Wildlife Range itself. The Solicitor found it "obvious that the segregative effect of the withdrawal application was, under the regulations in effect at that time, effective against passage of title of submerged lands to the State upon statehood." 86 Interior Dec. 151, 175 (1978). He criticized the 1959 opinion for failing to mention the exceptions made by section 5 of the Submerged Lands Act, and he concluded:

[I]t is plain that a completed withdrawal of lands qualifies as an express retention under the Submerged Lands Act. The Departmental regulations in effect at that time gave an identical effect to an application—it segregated the lands from disposal to the same extent that the withdrawal applied for would, if finally executed, have done. The purpose of the regulation is clear: The filing of an application prevented anything from happening, prior to a decision on the application, which would have rendered a favorable decision on the application impossible. Now the Secretary might well have decided in his discretion to reject a previously-filed application because of statehood, and instead let the State select the submerged lands in-

cluded in the application. But to allow statehood by itself to override the segregative effect of withdrawal applications provided for in the regulations substantially vitiates the meaning of the "expressly retained" proviso in the Submerged Lands Act.

Id. at 176.²²

I cannot agree that the "expressly retained" provision of the Submerged Lands Act gave such broad force to a temporary segregation of lands as the Solicitor concluded. Contrary to the Solicitor's view, to require secretarial action on the application is not to vitiate the provision. The Secretary had more than a year in which to act on the application for the Wildlife Range, from its filing in November 1957 to Alaska's admission in January 1959.

Furthermore, if secretarial action were not required, then submerged lands could be "expressly retained" by any agency that filed an application for them.²³ Yet review of the merits of an application was to follow, not to precede, its filing, 43 C.F.R. §§ 295.12-295.13, 22 Fed. Reg. 6614

²² In a footnote the Solicitor added, "It also substantially vitiates the meaning of § 6(e) of the Statehood Act" 86 Interior Dec. at 176 n.35. I have already rejected this latter argument.

In the 1992 supplemental opinion, 100 Interior Dec. 103, the Solicitor did not take a position on whether a withdrawal application can by itself expressly retain submerged lands. His analysis was limited to the area found to be covered by a previous withdrawal, Public Land Order 82, and he found that Congress had addressed the disposition of that entire area in the Alaska Statehood Act. 100 Interior Dec. at 105, 106 n.18, 108 n.20, 125. For submerged lands covered by both Public Land Order 82 and by the withdrawal application, he found that Congress intended to defeat state title by section 6(e) of the Statehood Act. *Id.* at 138.

²³ Under the regulations, applications might be filed by "the heads of Federal agencies and instrumentalities and of States and the Territory of Alaska and their political subdivisions or any subordinate officer designated by them." 43 C.F.R. § 295.9, 22 Fed. Reg. 6614 (1957).

(1957), and a decision on the application could be made only at the secretarial level. That was so because the Secretary's authority to withdraw and reserve the lands rested on a delegation to him by the President. Exec. Order No. 10,355, 3 C.F.R. 873 (1949-1953), *reprinted as amended in* 43 U.S.C. § 141 note (1988 & Supp. V 1993). By section 3 of the delegation, the Secretary could redelegate his authority only to the Under Secretary and the Assistant Secretaries of the Interior.²⁴

I therefore find that the application for the Arctic Wildlife Range, together with the regulation segregating the lands applied for, did not cause any submerged lands to be "expressly retained by . . . the United States when the State entered the Union."

²⁴ Executive Order No. 10,355 provided in part:

Section 1. (a) Subject to the provisions of subsections (b), (c), and (d) of this section, I hereby delegate to the Secretary of the Interior the authority vested in the President by section 1 of the act of June 25, 1910, ch. 421, 36 Stat. 847, and the authority otherwise vested in him to withdraw or reserve lands of the public domain and other lands owned or controlled by the United States in the continental United States or Alaska for public purposes, including the authority to modify or revoke withdrawals and reservations of such lands heretofore or hereafter made.

(b) All orders issued by the Secretary of the Interior under the authority of this order shall be designated as public land orders and shall be submitted to the Division of the Federal Register, General Services Administration, for filing and for publication in the Federal Register.

....
Sec. 2. The Secretary of the Interior is authorized to issue such rules and regulations, and to prescribe such procedures, as he may from time to time deem necessary or desirable for the exercise of the authority delegated to him by this order.

Sec. 3. The Secretary of the Interior is authorized to redelegate the authority delegated to him by this order to one or more of the following-designated officers: the Under Secretary of the Interior and the Assistant Secretaries of the Interior.

b. *Authority for an executive retention*

A further point reinforces the conclusion just reached. I have considerable doubt whether even the Secretary of the Interior was authorized to grant the application for the Wildlife Range, insofar as it applied to any lands under navigable waters, on the terms requested. If this doubt is well-founded, then the mere pendency of the application cannot have withheld submerged lands.

The doubts about the Secretary's authority arise from the following background. Congress has plenary power over federally owned lands in a territory, but it may delegate power to the executive branch. *See supra* section B(1). The United States has suggested two sources of executive authority in this case. One is the Pickett Act, adopted in 1910, which authorized the President to make withdrawals of public lands for public purposes. Act of June 25, 1910, ch. 421, § 1, 36 Stat. 847 (repealed 1976). The other is the implied authority of the President, recognized by the Court in 1915, on the basis of long continued congressional acquiescence in executive withdrawals. *United States v. Midwest Oil Co.*, 236 U.S. 459 (1915).²⁵ The President redelegated his authority from both sources to the Secretary of the Interior. Exec. Order No. 10,355, *supra* note 24.²⁶

Thus, the Secretary's authority to grant the application for the Wildlife Range rested ultimately either on the Pickett Act

²⁵ Congress eliminated the President's implied authority in 1976 at the same time that it repealed his Pickett Act authority. Federal Land Policy and Management Act of 1976, Pub. L. No. 94-579, § 704(a), 90 Stat. 2743, 2792. Language of the Pickett Act that was not repealed is codified at 43 U.S.C. § 142 (1988).

²⁶ For a critical review of the authorization for withdrawals for the use of the Fish and Wildlife Service, see Charles F. Wheatley, Jr., *Study of Withdrawals and Reservations of Public Domain Lands* 245-57 (U.S. Public Land Law Review Comm'n, 1 Background Studies, 1969 & photo. reprint).

or on the implied authority of the President. The application itself said that the withdrawal should be made under the President's "inherent" (that is, nonstatutory) authority. See *supra* note 1. The published notice of application, *supra* note 2, was silent on the point. The eventual public land order, *supra* note 3, referred simply to "the authority vested in the President."

I believe that both the application and the public land order must be construed to rest on the implied authority of the President, not on the Pickett Act. This is so because both documents closed the lands to mining. The focus of these documents was on the uplands. The original application and the published notice, *supra* notes 1-2, called for mining locations to be precluded until September 1, 1958. Later the date was extended to September 1, 1959; then to September 1, 1960; and finally to September 1, 1961. 23 Fed. Reg. 7592 (1958); 24 *id.* 7143 (1959); 25 *id.* 10,323 (1960). The eventual public land order of December 1960, *supra* note 3, closed the Range to mining entirely.²⁷ The Pickett Act, however, required lands withdrawn to remain open under the mining laws:

Be it enacted . . . That the President may, at any time in his discretion, temporarily withdraw from settlement, location, sale, or entry any of the public lands of the United States including the District of Alaska and reserve the same for water-power sites, irrigation, classification of lands, or other public purposes to be specified in the orders of withdrawals, and such withdrawals or reserva-

²⁷ In contrast, the order creating the National Petroleum Reserve-Alaska, which I did find to be authorized by the Pickett Act, said that the reservation "shall be for oil and gas only and shall not interfere with the use of the lands or waters within the area indicated for any legal purpose not inconsistent therewith." Exec. Order 3797-A, *supra* section VIII at 343 n.1.

tions shall remain in force until revoked by him or by an Act of Congress.

SEC. 2. That all lands withdrawn under the provisions of this Act shall at all times be open to exploration, discovery, occupation, and purchase under the mining laws of the United States, so far as the same apply to metalliferous minerals

36 Stat. 847, as amended by Act of Aug. 24, 1912, ch. 369, 37 Stat. 497.²⁸

The Interior Department's treatment of mining in the Range, moreover, reflected a deliberate policy decision. At the time of the November 1957 application, the Secretary explained:

[W]hile this area will be closed to all forms of land entry which leads to appropriation of the title to the surface, . . . we intend to submit to Congress legislation to authorize metalliferous mining under a permit system. At the present time mining can only be conducted under the existing law which would lead to patent of the surface to the mining claimant who had perfected his claim. If Congress does not enact legislation to permit mining under the permit system, we will have to reconsider the opening of this area to mining activities.

U.S. Ex. 32. The legislation referred to was sent to Congress, after statehood, in the spring of 1959. U.S. Ex. 27 (Ak. Exs. 11, 56). The draft bill gave the Secretary of the Interior specific authorization to establish an Arctic Wildlife Range and to allow mining and mineral leasing on special

²⁸ Section 2 forbade the lands withdrawn to be closed to certain activities under the mining laws. If lands were not already open under the mining laws for those purposes, I do not believe they would be thrown open to exploration, discovery, occupation, or purchase merely by virtue of a Pickett Act withdrawal.

terms. S. 1899, 86th Cong., 1st Sess. (1959), *reprinted in Arctic Wildlife Range—Alaska*, *supra* note 12, at 1. During Senate hearings on the bill, it was brought out that the only reason for seeking the legislation was the desire to allow mining on terms different from those of existing law. *Arctic Wildlife Range—Alaska*, *supra* note 12, at 435 (statement of Theodore Stevens (accompanying Assistant Secretary of the Interior Ross L. Leffler)). The Interior Department was certainly aware of the mining provision of the Pickett Act. *Id.*

It was after Congress failed to enact an Arctic Wildlife Range bill that Secretary Seaton issued Public Land Order 2214. For this action, as for the earlier application, the implied authority of the President was the only suitable basis. As to the uplands, no difficulties with a withdrawal on this basis have been suggested. For Alaskan submerged lands, however, I have already found that implied authority was probably not available. Congress had provided otherwise in the Alaska Right of Way Act, which was inconsistent with an implied executive authority to retain submerged lands beyond Alaska's statehood:

[N]othing in this Act contained shall be construed as impairing in any degree the title of any State that may hereafter be erected out of said District, or any part thereof, to tide lands and beds of any of its navigable waters, or the right of such State to regulate the use thereof, nor the right of the United States to resume possession of such lands, *it being declared that all such rights shall continue to be held by the United States in trust for the people of any State or States which may hereafter be erected out of said District.* The term "navigable waters," as herein used, shall be held to include all tidal waters up to the line of ordinary high tide and all nontidal waters navigable in fact up to the line of ordinary high-water mark.

Act of May 14, 1898, ch. 299, § 2, 30 Stat. 409 (codified at

43 U.S.C. § 942-1 (1988)) (emphasis added).²⁹ See *supra* section VIII at 406 n.45, 410-11, 415.

Thus there are severe doubts about the Secretary's authority to grant the application as it stood and insofar as it applied to submerged lands. If well founded, they form a second and independent ground for holding that the application for the Range, together with the regulation segregating the lands applied for, did not expressly retain lands within the meaning of Submerged Lands Act section 5(a).³⁰

6. Conclusion

I find that, for any lands beneath navigable waters that are tidally influenced and that were included within the application for withdrawal and creation of the Arctic Wildlife Range, the application did not effectively withhold the lands from Alaska. I therefore recommend that the Court answer question 9 in favor of Alaska.

C. Question 10: The interpretation of the withdrawal application

The conclusion I have just reached on question 9, if accepted by the Court, makes question 10 moot. The application for the Range did not keep submerged lands from passing to Alaska at statehood. It is therefore unnecessary to

²⁹ The Alaska Right of Way Act has been repealed "insofar as applicable to the issuance of rights-of-way over, upon, under, and through the public lands and lands in the National Forest System." Federal Land Policy and Management Act of 1976, Pub. L. No. 94-579, § 706(a), 90 Stat. 2743, 2793.

³⁰ Had Public Land Order 2214 been issued before statehood, it might be argued that any unauthorized withdrawal of submerged lands was ratified by Congress in Statehood Act section 6(e). As I have already found, however, section 6(e) did not extend to the application.

decide just what submerged lands, if any, the application covered.

The Court might, of course, disagree as to question 9 and so make question 10 significant after all. With such a possibility in mind, the parties have asked the Master to address all of the questions presented in the joint statement. Joint Statement 21. Accordingly, I proceed to question 10.

As part of the context of the discussion, I shall assume that the Court does reject my recommendation on question 9. This assumption is reflected in the statement of question 10 itself:

Assuming the acreage included in the 1958 application for the Arctic Wildlife Range was effectively withheld from Alaska, does the Range embrace the submerged lands between the mainland and the barrier islands in the area between the Canadian boundary and Brownlow Point?

Joint Statement 20. As explained earlier, question 10 has been broadened since it was written. See *supra* section A. The question now involves two parts. One is the original question: what is the location of the boundary described in the application for the Range? The other is the question raised after *Montana*: does the application include lands under navigable waters that lie inside this boundary?

1. *The location of the boundary*

The notice of application for the Range described the proposed boundary as follows:

Beginning at the Intersection of the International Boundary line between Alaska and Yukon Territory, Canada, with the line of extreme low water of the Arctic Ocean in the vicinity of Monument 1 of said International Boundary line;

Thence westerly along the said line of extreme low water, including all offshore bars, reefs, and islands to a point of land on the Arctic Seacoast known as Brownlow Point

23 Fed. Reg. 364 (1958) (quoted more fully *supra* note 2).³¹

In the United States' view, the boundary described is a single continuous line, running from the Canadian border to Brownlow Point and following the seaward side of offshore bars, reefs, and islands. In Alaska's view, the boundary consists of one line following the sinuosities of the mainland shore, with additional lines around islands and other features that are exposed at extreme low tide.

The geography is shown on a small scale in figure 1.1. The parties' positions are shown, on a somewhat larger scale, in figures 9.1 and 9.2 (facing page 450). At the hearing, witnesses for each side testified to the boundary using National Ocean Service charts on a scale of about 1:50,000, or five times the scale of the maps used in figures 9.1 and 9.2. Joint Exs. e through i. For the United States, testimony on the boundary was given by Dr. Robert Smith, a geographer at the Department of State. Tr. 20-24, 123-24, 180-93. Dr. Smith's interpretation of the boundary is shown on the joint exhibits in blue.³² For Alaska, testimony was given by Mr. Claud Hoffman, a professional surveyor and

³¹ The same language appeared in the post-statehood public land order establishing the Range. Public Land Order 2214, 25 Fed. Reg. 12,598 (1960) (quoted in part *supra* note 3).

³² In addition to the NOS charts forming the joint exhibits, the United States' position is also shown in detail in two other sets of exhibits. The several versions are all similar but not identical.

One version is U.S. Exhibit 58. It comprises eleven sheets of Geological Survey maps, covering the same area as the NOS charts and also on a large scale (1:63,360). The maps in exhibit 58 are titled "Arctic National Wildlife Range Coastal Boundary"; are dated October 2, 1978; and are identified in the exhibit list as giving the official position of the Depart-

Director of Technical Services for the Alaska Department of Natural Resources. Tr. 135, 149-51, 156-59, 169-79. Mr. Hoffman's interpretation appears on the same exhibits in red.

The lands that are treated differently by the parties' interpretations are of two main kinds. One is land lying between offshore formations and the mainland, often in the form of long narrow lagoons.³³ These lands are inside the Range boundary on the United States' interpretation, outside it on Alaska's. For example, near the eastern end of the Range as shown in figure 9.2, the United States' version of the boundary extends from Demarcation Point to Icy Reef, thus enclosing Demarcation Bay and Pingokraluk and Siku Lagoons. Alaska's version follows the mainland around the inside of Demarcation Bay and the lagoons and separately encloses Icy Reef.

Second are the mouths of rivers on the mainland. For example, there are no offshore formations where the Katakaturuk River empties into Camden Bay, and the parties therefore agree that the boundary there lies on the mainland. Joint Ex. h; fig. 9.1. The United States would draw the boundary across the mouth of the river. Alaska would follow the low-water line upriver for some distance before

ment of the Interior. 1 Transcript vi. Perhaps inadvertently, these maps were not specifically referred to at the hearing or elsewhere in the record.

U.S. Exhibits 46 and 47, like U.S. Exhibit 58, issue from the Department of the Interior. These are a small-scale map of the Range and several large-scale detail maps, all dated June 1971. Mr. Walt McAllester, chief of the Division of Realty of the Fish and Wildlife Service, identified exhibits 46 and 47 as the current maps from an atlas or "status book" showing every Fish and Wildlife Service installation. Tr. 46, 63-65. The United States has referred to exhibits 46 and 47 as "the best evidence of the Department of the Interior's interpretation of the boundary location." USB 17.

³³ Photographs of some of the lagoons are in evidence as United States Exhibits 56 and 57. Tr. 83-84.

crossing. On Alaska's approach, any islands in the river mouth are treated like barrier islands offshore, and the lower part of the river, like the lagoons, is excluded from the Range. Similarly Alaska would exclude from the Range the lower parts of the Hulahula, Okpilak, Jago, and Aichilik Rivers, among others. Joint Exs. g, f; figs. 9.1 (Hulahula River), 9.2 (other rivers). This approach is essentially the same that Alaska took in question 11, which affected the boundary of the National Petroleum Reserve-Alaska at the mouths of rivers. *See supra* section VIII(C)(4)(c).

a. The boundary description on its face

In reaching their different interpretations, the parties emphasize different elements of the boundary description. Alaska focuses on the phrase "line of extreme low water"; it objects that the United States' interpretation includes water crossings departing from that line.

The United States replies that the phrase is not simply "line of extreme low water" but "the line of extreme low water of the Arctic Ocean . . . including all offshore bars, reefs, and islands . . ." *See supra* pages 478-79. It points to testimony that the Arctic Ocean begins on the seaward side of barrier formations, not at the low-water line of the lagoons or at the banks of rivers. Tr. 25-26, 120-21; Joint Ex. e.

As to the phrase about offshore formations, the United States points out that bars and reefs are to be included inside the boundary even if they are permanently submerged and so lack a low-water line. Both sides agreed that such formations are possible. Tr. 17-18, 38, 208 (Smith); Tr. 152, 277 (Hoffman). Although the testimony was not entirely clear, there was a suggestion that submerged bars do exist inside of Demarcation Bay. Tr. 18, 32-33, 38-39; Joint Ex. e.

Alaska responds to the United States' points with an

asserted rule of construction: that "descriptions by metes and bounds . . . control general descriptive language in a boundary description if there is a conflict." ARB 16, citing *Prentice v. Northern Pacific Railroad*, 154 U.S. 163 (1894). Alaska then characterizes "line of extreme low water" as a metes-and-bounds description and relegates the rest to the category of general descriptive language.

I cannot agree with Alaska that all words except "line of extreme low water" should be ignored. As I have found in connection with the boundary of the National Petroleum Reserve-Alaska, the objective must be to ascertain the intent of the boundary description, and the *Prentice* case is not to the contrary. Section VIII, *supra*, at 370. In any event, the rule Alaska states does not support its conclusion. Whatever distinction one might make between a metes-and-bounds description and a more general description, surely the entire phrase "the said line of extreme low water" is part of the former. But the question, in part, is what this phrase means. Does the word "line," used in the singular, imply that the boundary is a single line? Does the word "said," referring back to the previous paragraph, incorporate into the description the qualifying phrase "of the Arctic Ocean"? If so, did the drafters think that "Arctic Ocean" included the lagoons? To resolve such questions about the meaning of the description, it becomes appropriate to consider other evidence of what was intended.

b. Other evidence of the intended boundary

The United States argues that its interpretation of the boundary language is supported by the consistent interpretation of the Department of the Interior and by the purposes of the Range. Alaska objects that much of the United States' evidence is irrelevant because it dates from times later than Alaska's admission to the Union in January 1959. See Tr. 80-82. I do not deal with Alaska's objection because I be-

lieve that the evidence up to January 1959 is sufficient to resolve the question of the boundary location.

(1) Prestatehood maps

The single clearest item of evidence comes from an April 1958 report of the Interior Department on the application for the Range. U.S. Ex. 24; Ak. Ex. 20. This report, made by the Bureau of Land Management, stated, "The description of the proposed area has not been altered since it was first proposed, and is sufficiently clear so that it may be plotted on maps commonly available." *Id.* at 2. The last page of the report was a map, which showed the northern boundary as a smooth line seaward of barrier features. See Tr. 57-58, 61-62, 118-19.

Another prestatehood map is of similar import. This second map was attached to a press release issued by the Secretary of the Interior in November 1957, announcing that the application for creation of the Range had been filed. U.S. Ex. 12; Ak. Ex. 57. These are the only prestatehood maps in evidence that purport to show the boundary of the proposed Range.³⁴

³⁴ Alaska correctly points out that the maps show only the exterior boundary for the Range; they do not establish whether all submerged lands inside the boundary were to be withdrawn or whether there were other exceptions to the withdrawal. The exterior boundary, however, is the only question being considered in this section.

One other prestatehood exhibit might be thought, incorrectly, to show a boundary for the Range. U.S. Ex. 61; Tr. 43-44. The exhibit consists of excerpts from a July 1958 document issued by the Bureau of Land Management and titled "Alaska: Federal Land Withdrawals and Reservations." Panels 8 and 1B of the exhibit show a withdrawal along the Arctic coast in the Range area. However, the area depicted is not the Wildlife Range (for which there was only an application in July 1958) but a much earlier withdrawal. Public Land Order 82, *supra* note 7. This interpretation is supported by the legend included with the exhibit, the southern boundary that is shown, and the failure to show a western boundary near

(2) *Development of the boundary description*

Besides the maps of the proposed Range, the record includes several drafts of the boundary description. In the earliest, dated September 16, 1957, the proposed northern boundary is described simply as running "west along the Arctic Coastline." U.S. Ex. 2.³⁵ In the second, which has a cover memo dated October 22, 1957, the "Arctic Coastline" is changed to the "mean high tide level of Beaufort Sea." U.S. Ex. 7; Ak. Exs. 45, 70.³⁶ Thus, a tidal datum is specified for the first time. In the third version, handwritten changes have been made in the October 22 description, bringing it to its final form. U.S. Ex. 8; Ak. Ex. 69.³⁷ The "mean high tide level of Beaufort Sea" has now become the

Brownlow Point. The interpretation also accords with that of the Solicitor of the Interior. 86 Interior Dec. 151, 162 (1978), *modified and supplemented in other respects*, 100 Interior Dec. 103 (1992).

³⁵ The September 16 description starts at the northwest corner of the Range, goes south and east to the boundary with Canada, and concludes:

thence north along the International Boundary to the Arctic Ocean;
thence west along the Arctic Coastline to its intersection with the
Canning River, at the point of beginning.

U.S. Ex. 2. This description, according to the signature line, was written by John I. Buckley of the Fish and Wildlife Service.

³⁶ More fully, in the October 22 version the boundary goes north

following the said International Boundary for approximately one hundred (100) statute miles to the Arctic Seacoast at the level of mean high tide . . . ;

thence in a generally westerly direction along the said mean high tide level of Beaufort Sea to the point of beginning.

U.S. Ex. 7; Ak. Exs. 45, 70. By the October 22 memorandum, the description was sent by Clarence J. Rhode, regional director of the Bureau of Sport Fisheries and Wildlife in Juneau, to the director of the bureau in Washington.

³⁷ These final changes were made in the Washington office of the Fish and Wildlife Service by Mr. F.G. Spoden, the Assistant Chief of the Division of Realty. Tr. 49-50.

"said line of extreme low water, including all offshore bars, reefs, and islands." *See supra* page 479. That is, the tidal datum is changed from high water to low water, and offshore formations are mentioned for the first time.

This sequence of descriptions strongly suggests, as the United States contends, that "the said line of extreme low water" in the final description does mean "the line of extreme low water of the Arctic Ocean." It also suggests, compatibly with the maps, that the drafters contemplated a single line and added the words "including all offshore bars, reefs, and islands" to make clear whether that line lay along the mainland or outside the barrier formations.

Alaska contends that the development of the description shows a significant concern with whether tidelands were to be part of the Range and, by implication, an absence of interest in the submerged lands of the lagoons. On the interpretation suggested by the maps, however, the implication does not follow. The change from mean high tide to extreme low water would have its effect on the seaward side of any barrier formations. The lagoons and any tidelands facing on lagoons are landward of the barriers and would be inside the boundary in either case.

(3) *The purposes of the Range*

Alaska argues that the purposes of the Wildlife Range, as they were understood prior to statehood, did not call for the inclusion of submerged lands inside the boundary. It brings to bear two main items of documentation.

The first is a letter of October 15, 1957, written by Clarence J. Rhode. U.S. Ex. 5. Mr. Rhode, a biologist, was the Regional Director for Alaska of the Bureau of Sport Fisheries and Wildlife, and he was the person responsible for the draft boundary description of October 22, 1957. Alaska points to testimony that Mr. Rhode was in the best position to determine what lands were needed to preserve the re-

sources of the proposed Range. Tr. 102. The October 15 letter was addressed to Olaus J. Murie, director of the Wilderness Society and the principal conservationist behind the Arctic Wildlife Range. In it, Mr. Rhode said:

Ted Stevens recently visited us and I get the impression they [the Interior Department] are getting ready to move on this matter [presumably, the Arctic Wildlife Range]

....

We are presently compiling a list of other small areas which should be set aside for wildlife before Statehood. The tidelands bills would jeopardize waterfowl areas everywhere even though they may now be considered with a National Forest or even a Wildlife Range such as the Kenai. The solution appears to be withdrawal action including the tidelands.

U.S. Ex. 5.

Alaska reasons that, although this letter speaks of tidelands, it nowhere speaks of withdrawing lands below the low-water line. The United States, which also relies on the letter, reads it to the contrary as referring to water areas generally.

The United States' reading appears to be correct. Although the letter uses the word "tidelands," it cannot have used it in the technical sense of land "covered and uncovered by the daily rise and fall of the tide." 1 Aaron L. Shalowitz, *Shore and Sea Boundaries* 318 (U.S. Dep't of Commerce Pub. 10-1, 1962). That is shown by its reference to the Submerged Lands Act (passed in 1953) as the "tidelands bills." This use of "tidelands" to include permanently submerged lands was common at the time. See, e.g., 99 Cong. Rec., pt. 13, at 583, 601-02 (1953) (indexing all references to submerged lands under "tidelands").

The second document to which Alaska refers is a statement of justification for the Range, dated November 7, 1957.

U.S. Ex. 9; Ak. Ex. 16. The justification is in the form of a memorandum from D.H. Janzen, director of the Bureau of Sport Fisheries and Wildlife, to the Bureau of Land Management; it was made part of the application for the Range, *supra* note 1, that was later submitted on November 18. The justification said in part:

The outdoor recreation activities of Alaska's visitors and residents bring to the Territory an income that is out-ranked only by commercial fishing and mining. The enormous development of the outdoor recreation industry and the growing willingness of vacationists to spend their ever-increasing vacation time on long trips to scenic wild areas strongly indicate that in the future Alaska's outdoor recreation resources may contribute more revenue than any other industry in the Territory. The wildlife and the wilderness frontiers of Alaska are the basic resources upon which the recreation industry is dependent.

....

The portion of the Arctic plain included in the proposal is a major habitat, particularly in summer, for the great herds of Arctic caribou, and the countless lakes, ponds, and marshes found here are nesting grounds for large numbers of migratory waterfowl that spend about half of each year in the United States. Thus the production here is important to a great many sportsmen. The river bottoms with their willow thickets furnish habitat for moose. This section of the seacoast provides habitat for polar bears, Arctic foxes, seals, and whales.

The Arctic caribou herds use all of the Brooks Range in summer and the south side particularly in winter. The Dall sheep are year-round residents and, like the caribou, occur in greater total numbers here than in other parts of Alaska. Moose and grizzlies are common. Wolverines are seen occasionally. Ptarmigan are numerous. The

south slope of the Brooks Range meets the year-round requirements for all of the native wildlife.

....
For the wilderness explorer, whether primarily fisherman, hunter, photographer, or mountain climber, certain portions of the Arctic coast (if and when access is permitted by the military) and the north slope river valleys, such as the Canning, Hulahula, Okpi^{1/2}, Aichilik, Kongakut, and Firth, and their great background of lofty [lofty?] mountains, offer a wilderness experience not duplicated elsewhere in our country.

This unmodified region is important for game management research, particularly on caribou range problems. This spacious, unaltered habitat would permit the reintroduction of the musk ox.

Looking ahead 50 years at the unfolding story of Alaska's development, it is clear that the only economically feasible opportunity for maintain[ing] a wilderness frontier large enough for the preservation of the caribou, the grizzly, the Dall sheep, the wolverine, and the polar bear, all of which require a sizeable unrestricted range, lies in this northeastern Arctic region of the Territory.

The proposed Arctic Wildlife Range offers an ideal opportunity, and the only one in Alaska, to preserve an undisturbed portion of the Arctic large enough to be biologically self-sufficient. It would comprise one of the most magnificent wildlife and wilderness areas in North America, being exceeded in extent only by Canada's Wood Buffalo Scientific Study Area, which is farther south and represents a different habitat.

U.S. Ex. 9; Ak. Ex. 16.

In Alaska's view, this statement shows that little or no importance was attached to the lagoons at the time the proposal for the Range was being prepared. Alaska argues fur-

ther that whatever importance may have been attached to them deserves little weight because it was ill-informed.

I cannot agree with Alaska's assessment. There was considerable testimony on the meaning of the second paragraph quoted above. Tr. 102-04. Alaska brought out that, although the lagoons are not part of the "Arctic plain" nor of the "lakes, ponds, and marshes," they are part of "[t]his section of the seacoast." *Id.* Thus both the lagoons and the disputed riverbeds are covered in this paragraph of the justification:

The river bottoms with their willow thickets furnish habitat for moose. This section of the seacoast provides habitat for polar bears, Arctic foxes, seals, and whales.

Furthermore, there was undisputed evidence that polar bears use the lagoon areas for feeding and that seals have been seen in both lagoons and rivers. Tr. 90-92.

Alaska objects that "seacoast" is inappropriately broad, covering not only lagoons and barrier islands but also areas farther offshore that are plainly outside the Range boundary. See Tr. 104. It objects also that whales apparently use only the parts of the seacoast outside the lagoons; that it is questionable whether polar bears make their dens in the lagoons; and that other creatures not mentioned do use the lagoons, especially caribou and waterfowl. See Tr. 87-89, 90-92, 108-11.

The objections are not well taken. The present question is where the drafters of the boundary description for the Range intended to place the seaward boundary. The reference to aquatic animals in connection with the seacoast shows that they must have intended the boundary to take in submerged lands. That they had imperfect knowledge of what animals used the lagoons and in what ways is irrelevant. For instance, there is no significance in the failure to mention caribou as using the lagoons, for the justification shows (in the

fifth paragraph quoted) that research on the caribou was one of the original purposes.

The justification also makes clear that the purposes of the Range included preserving recreational values as well as preserving wildlife. The fourth paragraph quoted speaks of the "wilderness explorer," who might be "primarily fisherman," and in the same sentence it mentions both the Arctic coast and the north slope river valleys. If these areas were to serve the fisherman, one must suppose that some submerged lands were included inside the boundary.

Alaska says that the lagoons did not receive explicit mention in documents concerning the Range until the early 1970s and that earlier documents tended to speak of the coastal plain, not the coast, as the northernmost region of the Range. It is certainly true that the later materials give the lagoons great emphasis, but that does not undo the indirect reference to them as "this section of the seacoast" in the 1957 justification. Nor can one put much reliance on the failure of other early documents to mention the seacoast as a distinct region of the Range. For example, one of the documents cited is the Bureau of Land Management's report of April 1958, which states: "The northernmost portion consists of Arctic plain, a level, windy tundra-covered area with varying degrees of drainage." U.S. Ex. 24 (Ak. Ex. 20) at 2. But this same report, as already discussed, included a map showing the lagoons inside the boundary. *See supra* page 483. The description quoted is also inapplicable to the barrier islands, which are clearly inside the boundary. Tr. 105-06, 118.

I conclude that the purposes of the Range, as understood prior to Alaska's statehood, give support to a finding that the lagoons and the mouths of rivers were intended to be inside the boundary.

(4) *Comparison with other descriptions*

The prestatehood evidence about the proposed Wildlife Range—including maps, drafts of the boundary description, and intended purposes—together give strong support to the United States' interpretation of the boundary as a continuous line along the outside of barrier reefs and islands. Alaska contests the interpretation on the further basis of comparison with other boundary descriptions.

One type of comparison is with the description of other wildlife refuges in Alaska. As the State points out, there was testimony that the Fish and Wildlife Service in Washington regularly reviewed, and often modified, the boundary descriptions received from its regional offices. Tr. 49-50, 68-70. One should therefore expect reasonable consistency in the style of description across different refuges.

First, Alaska mentions the Simeonof National Wildlife Refuge, which was created by public land order in November 1958. Public Land Order 1749, 23 Fed. Reg. 8623 (1958) (Ak. Ex. 73). The description of the Simeonof refuge said:

Subject to valid existing rights, the following-described public lands, tidelands, and adjacent waters in Alaska are hereby withdrawn . . . as a refuge for the preservation and propagation of the sea otter and other wildlife thereon . . . :

All of Simeonof Island and its tidelands which are located in the Shumagin Group at approximate latitude 54°53' N., longitude 159°15' W., together with all adjacent areas of water extending one mile beyond mean low water, and including any islands within said one mile area.

The area described contains approximately 10,442 acres of land and water.

Id. The second description was of a proposed addition to an

existing refuge, the Aleutian Islands National Wildlife Refuge. The application for withdrawal, published in October 1958 and slightly amended in November, said:

The applicant desires the land for an addition to the Aleutian Islands National Wildlife Refuge for protection of and to facilitate the management of the sea otter inhabiting the coastal waters.

....
The lands involved in the application are:

All tidelands and all adjoining areas of water extending three miles from mean high tide, adjacent to the Aleutian Islands National Wildlife Refuge as established by Executive Order 1733 of March 3, 1913, and modified by subsequent orders.

23 Fed. Reg. 8163 (1958) (Ak. Ex. 74); 23 *id.* 9039.³⁸

Alaska suggests that these two descriptions very clearly took in submerged lands, and it infers that the description of the Arctic Wildlife Range, being less clear, did not include them. Although the argument is plausible, I find two difficulties with it. First, the boundary in both the Simeonof and Aleutian Islands descriptions lies entirely at sea, one outside a one-mile belt of water and the other outside a three-mile belt. In contrast, much of the seaward boundary of the Arctic range lies along the outer shore of the barrier islands. It is thus at least possible, as the United States suggests, that waters landward of the barriers were assumed to be inside the boundary of the Arctic range. No corresponding assumption was possible for the Simeonof and Aleutian ranges.

Second, the Simeonof and Aleutian descriptions were not

³⁸ This application was the subject of a Solicitor's opinion in August 1959, holding that the lands applied for passed to Alaska at statehood. See *supra* pages 469-70. Apparently no further action was taken on the application after the Solicitor's opinion.

the only ones in which the Interior Department made the treatment of submerged lands clear. Other descriptions clearly excluded them. For example, the lands in the Kuskokwim National Wildlife Refuge were described in part as follows:

Beginning on the shore of Bering Sea at the line of mean high tide and at the south side of the entrance to Hooper Bay . . . ; . . . ; thence northwesterly with the line of mean high tide of Bering Sea 50 miles to the place of beginning, containing approximately 1,870 square miles of lands and waters, *but excluding lands beneath navigable waters as defined in section 2 of the Submerged Lands Act of 1953* (67 Stat. 29; 43 U.S.C. 1301).

Public Land Order 2213, 25 Fed. Reg. 12,597, 12,598 (1960) (emphasis added). The description of the Izembek National Wildlife Range used the same exclusionary language. Public Land Order 2216, 25 Fed. Reg. 12,599, 12,600 (1960). Both these ranges were created on December 6, 1960, the same day as the Arctic National Wildlife Range.³⁹

The Arctic range fits neither the inclusive pattern of the Simeonof and Aleutian Island descriptions nor the exclusive pattern of the Kuskokwim and Izembek descriptions. I conclude that no inference about the intent of the Arctic range description can be drawn.

Finally, Alaska compares the boundary description of the Arctic National Wildlife Range with the state boundary descriptions considered in *United States v. Louisiana*, 363 U.S. 1 (1960). The question there was the extent of the grants made by the Submerged Lands Act to the Gulf States, which in turn depended on each state's "boundaries in the Gulf of

³⁹ For the Arctic range, compare Public Land Order 2214, 25 Fed. Reg. 12,598 and *supra* note 3.

Mexico . . . as they existed at the time such State became a member of the Union." Submerged Lands Act § 2(b), 43 U.S.C. § 1301(b). Louisiana's boundary, as specified in its act of admission, went

to the gulf of Mexico; thence, bounded by the said gulf, to the place of beginning, including all islands within three leagues of the coast

363 U.S. at 66, quoting 2 Stat. 701, 702 (1812). The State argued that this language gave it a boundary three leagues at sea. The Court, however, found that the boundary followed the mainland shore:

The boundary line is drawn . . . "to the gulf of Mexico," not *into* it for any distance. The State is thence to be bounded "*by the said gulf*," not by a line located three leagues out in the Gulf, "to the place of beginning," which is described as "*at the mouth of the river Sabine*," not somewhere beyond the mouth in the Gulf. (Emphasis added.) And while "all islands" within three leagues of the coast were to be included, there is no suggestion that all waters within three leagues were to be embraced as well. In short, the language of the Act evidently contemplated no territorial sea whatever.

363 U.S. at 67-68. The Court reached similar results for Mississippi and Alabama, both of which had boundaries "including all islands within six leagues of the shore." *Id.* at 79-82.

Alaska suggests that the boundary language for the Wildlife Range is remarkably similar. There is, however, an important difference between "including all islands within three leagues of the coast" and "including all offshore bars, reefs, and islands." The latter description contains no basis for claiming lands seaward of any barrier formations, and the United States has not claimed any belt of open water. Un-

like Louisiana's construction of the "three league" language, the United States' construction of the Wildlife Range boundary would not take in "waters and submerged lands which bear no proximate relation to any islands, and which would otherwise be part of the high seas." 363 U.S. at 70.⁴⁰

I conclude that the *Louisiana* case, like the descriptions of other wildlife refuges, is not contrary to the judgment I have reached from the evidence specific to the Arctic National Wildlife Range. I therefore find, in accordance with the United States' contention, that the boundary of the Range between the Canadian border and Brownlow Point is a single continuous line, following the seaward side of offshore bars, reefs, and islands and, where it meets rivers, crossing such rivers at their mouths.

2. Rights to submerged lands inside the boundary

Although lands under navigable waters lie inside the boundary of the Range, the ownership of these lands depends on more than the boundary location. According to the Court's decisions in *Montana v. United States*, 450 U.S. 544 (1981), and *Utah Division of State Lands v. United States*, 482 U.S. 193 (1987), it is strongly presumed that lands under inland navigable waters passed to Alaska at statehood.

Some of the lands that I have found to be inside the

⁴⁰ The Wildlife Range also differs from the *Louisiana* situation with respect to submerged lands shoreward of barrier islands. For the Wildlife Range, the whole dispute concerns these lagoons and other near-shore features. In *Louisiana*, the status of the corresponding areas was conceded by the United States: they were the property of Louisiana, Alabama, and Mississippi as lands under inland waters, independently of either the Submerged Lands Act or of the state boundary location. 363 U.S. at 67 n.108; *id.* at 98 (Black, J.); *id.* at 118 (Douglas, J.). Thus the areas disputed between the United States and the Gulf States there and the United States and Alaska here have no corresponding parts in common.

boundary are subject to this presumption. They include tidelands, the tidally influenced parts of rivers, and any areas inside the boundary forming juridical bays. *See supra* note 13.

For the United States to retain these lands under inland waters beyond Alaska's statehood, *Montana* and *Utah* require strong evidence of intent to make the lands part of the federal reservation and require a significant purpose, such as a "public exigency," in support of the intent. *See supra* section VIII(E)(4)(a). *Utah* requires, in addition, a showing of affirmative intent to defeat the State's title to the lands. *See supra* section VIII(E)(5).

Most of the evidence of the intent behind the application has been reviewed in the previous section. Especially relevant here is the statement of justification for the Range, which referred to the seacoast as providing habitat for polar bears, seals, and whales. The drafters cannot have thought this habitat was only upland. The justification also refers to the river bottoms as furnishing habitat for moose, and it mentions the interests of fishermen. All these elements point to an intent to make submerged lands part of the Range, not simply to place them inside the external boundary. In addition, there is the fact that the drafters deliberately changed the seaward boundary, moving it from mean high tide to extreme low water so as to take in the tidelands. A witness for the United States testified that such changes were often made in order to protect significant resources in the intertidal zone. Tr. 69. There would have been no point in moving the boundary in this way unless the tidelands were themselves to be reserved.

It is also clear that the reservation was meant to have permanent effect. The application for the Range was developed with conscious reference to Alaska's impending statehood. This is illustrated in Mr. Rhode's letter to the Wilderness Society, mentioning areas that should be set aside for wildlife before statehood. U.S. Ex. 5, *supra* pages 485-86. Thus

the Interior Department certainly intended to defeat Alaska's title to whatever submerged lands were made part of the Range, not merely to hold them until Alaska's admission to the Union.⁴¹

Alaska's remaining arguments are directed to whether there was a need for the United States to retain submerged lands as part of the Range. One argument is, in effect, that submerged lands were not subject to disposition under the public land laws and so that their withdrawal was unnecessary. The point is unpersuasive. The application sought not only a withdrawal of lands but also a positive reservation for the use of the Bureau of Sport Fisheries and Wildlife.⁴²

Next Alaska suggests that, assuming submerged lands were believed to be important to wildlife, the United States needed to retain not full ownership but at most the surface rights required for wildlife management. In a related point, Alaska suggests that even the retention of surface rights was unnecessary because, even without them, the United States

⁴¹ Alaska has argued that the *Utah* requirement of intent to defeat state title can be satisfied only by the intent of Congress itself. I noted this point but left it open in the discussion of the National Petroleum Reserve-Alaska. Section VIII, *supra*, at 431 n.72.

For the Wildlife Range, the appropriate analysis depends on the Court's theory in answering question 9. If the Court found that the application was effective as to submerged lands because there was a congressional retention, then Congress itself must have adopted an intention to defeat state title. If the Court found that the application was effective as to submerged lands because there was an executive retention, then this must imply that the executive had the power needed to determine what submerged lands it wanted to retain.

⁴² Compare section VIII, *supra*, at 407-09, 421-22, 427 (discussing the meaning of "public lands," the applicability of the public land laws to submerged lands in Alaska, and the need for a reservation to make such land available for public purposes of a specific agency of the United States). On the terms "withdrawal" and "reservation," *see supra* page 395 n.40.

could control the use of submerged lands in order to "prevent adverse impacts on federal uplands." ASRB 21.⁴³

The second argument does not go far enough, for there might be need to "prevent adverse impacts" on the submerged lands themselves, not just on the adjacent uplands. As for the first argument, I have rejected a similar position regarding the National Petroleum Reserve-Alaska. Section VIII(E)(6), *supra*. As noted in that discussion, the Submerged Lands Act treats lands and their natural resources together. The Act defines natural resources to include not only minerals but also marine animal and plant life. § 2(e), 43 U.S.C. § 1301(e). The rights transferred (or excepted from transfer) include both ownership of the lands and natural resources and "the right and power to manage, administer, lease, develop, and use" them. § 3(a), 43 U.S.C. § 1311(a). Thus, according to the Submerged Lands Act, the rights needed for wildlife management are not to be separated from the ownership of the lands, including ownership of the oil and gas rights. As noted in the National Petroleum Reserve

⁴³ In support of this point, Alaska cites *Minnesota ex rel. Alexander v. Block*, 660 F.2d 1240 (8th Cir. 1981), *cert. denied*, 455 U.S. 1007 (1982); *United States v. Brown*, 552 F.2d 817 (8th Cir.), *cert. denied*, 431 U.S. 949 (1977).

Both cases rely on the Property Clause of the Constitution, Art. IV, § 3, cl. 2, as the source of federal power. The *Brown* case upheld a federal conviction for duck hunting on a state-owned lake inside the boundaries of a national park, in violation of a National Park Service regulation. The court stated: "[W]e view the congressional power over federal lands to include the authority to regulate activities on non-federal public waters in order to protect wildlife and visitors on the lands." 552 F.2d at 822. In the *Minnesota* case, a federal statute prohibited the use of motorboats and snowmobiles on certain state-owned lands and waters within the boundaries of a federal wilderness area. The court upheld the statute, as against Minnesota's constitutional challenge, and said: "Congress' power must extend to regulation of conduct on or off the public land that would threaten the designated purpose of federal lands." 660 F.2d at 1249.

discussion, this result is also consistent with the Court's decision in *Utah*. Section VIII(E)(6), *supra*, at 444-45.

3. Conclusion

The premise of question 10 is that question 9 has been answered in favor of the United States. Both questions have called for consideration of the Court's decisions in *Montana* and *Utah*, in particular of the requirement that some "international duty or public exigency" exist to justify the withholding of submerged lands from the State. In recommending that question 9 be decided in favor of Alaska, I found it significant that the application for the Range might have been denied after statehood and that a denial would have implied the absence of a public exigency.

The discussion of question 10 has assumed that I was mistaken on question 9. Question 10 asks what lands under tidally influenced waters (if any) were included in the application for the Range. I found first (in section C(1)) that the disputed lands—including lagoons, tidelands, and the tidal parts of rivers—are inside the boundary of the Range. I then considered (in section C(2)) whether these lands were made part of the Range. Finding that the necessary intent was present, I turned to additional points that were argued regarding the existence of an exigency. I now find that these additional points, which are distinct from the point considered in question 9, should be decided in favor of the United States.

Accordingly, I conclude that, if the acreage included in the application was effectively withheld from Alaska, the Range does embrace the disputed lands. I therefore recommend that, if the Court finds for the United States on question 9, it should find for the United States on question 10 as well.

PART THREE SUMMARY

X
SUMMARY OF RECOMMENDATIONS

In summary, I recommend that the questions presented in the Joint Statement and its supplements (appendix A) be answered as follows:

Alaska's Counterclaim

Question 1. Alaska's Motion for Leave to File Counterclaim should be granted. Section I(C).

Alaska's Coastline

Questions 2, 3, 4, 12, and 13. The questions concern the basis for determining the extent of Alaska's submerged lands where barrier islands lie offshore between Icy Cape and the Canadian border. All the questions should be answered in the negative, that is, in favor of the United States. Alaska's submerged lands should be measured as a three-mile belt from its coastline, which should follow the baseline as determined under the Convention on the Territorial Sea and the Contiguous Zone without use of the straight baseline provisions of Article 4. The extent of Alaska's submerged lands should not be determined on the basis of straight baselines (questions 2 and 12); it should not be determined on the basis that waters between the mainland and the barrier islands are inland waters (questions 3 and 13); and it should not be determined on the basis that some submerged lands inside the barrier islands, although more than three miles from any upland, lie within Alaska's most seaward contiguous boundary (question 4). Section III(G).

Question 15. The southern portion of Harrison Bay, as shown on NOS chart 16064, is a juridical bay as contended by Alaska. Its closing line should be that agreed on by the parties. Section IV(E).

Question 5. Dinkum Sands is not an island constituting

part of Alaska's coastline under the Submerged Lands Act. Section V(J).

Question 6. The extension of the ARCO pier constructed in 1976 is part of the mainland for the purposes of the Submerged Lands Act. Section VI(D).

Question 14. The features referred to by question 14 should not be deemed low-tide elevations. Twelve other features, whose existence as low-tide elevations has been stipulated (appendix E), may be used in measuring Alaska's submerged lands. Section VII.

Federal Reservations

The National Petroleum Reserve-Alaska

Question 7. Harrison Bay and Smith Bay are not part of the National Petroleum Reserve-Alaska. Section VIII(A).

Question 8. Peard Bay is part of the National Petroleum Reserve-Alaska. Sections VIII(B)(3), VIII(F).

Question 11. Wainwright Inlet, the Kuk River, and Kugrua Bay and River are within the boundary of the National Petroleum Reserve-Alaska. Other small inlets, bays, and river estuaries between Icy Cape and Point Barrow and between Point Tangent and the Colville River are within the boundary of the National Petroleum Reserve-Alaska to the extent that they constitute either small lagoons with barrier reefs less than three miles offshore, in the sense of the discussion in section VIII(C)(4)(b), or rivers. Section VIII(C)(5). Furthermore, the lands under tidally influenced waters within the boundary of the Reserve are part of the National Petroleum Reserve-Alaska. Section VIII(F).

The Arctic National Wildlife Refuge

Question 9. The application for withdrawal and creation of the Arctic Wildlife Range did not effectively withhold offshore submerged lands from Alaska. Section IX(B)(6).

Question 10. If my recommendation on question 9 is found to be incorrect and the application was effective to withhold submerged lands from Alaska, then the Arctic National Wildlife Refuge does embrace the submerged lands between the mainland and the barrier islands from the Canadian boundary to Brownlow Point. Section IX(C)(3).

I recommend that the United States and Alaska be directed to draft a decree consistent with the foregoing recommendations.

The decree should provide that the parties bear their own costs. The expenses and compensation of the Special Master should be borne half by the United States and half by Alaska. As contemplated by the Orders of January 10, 1984 (appendix C) and June 3, 1986 (appendix D), the decree should also recognize the intervenors' obligation for their due share of the Special Master's expenses and compensation and should recognize the United States' and Alaska's rights to seek reimbursement from the intervenors to that extent.

The decree should provide that the Court retains jurisdiction to entertain such further proceedings, enter such orders, and issue such writs as from time to time may be deemed necessary or advisable to effectuate and supplement the decree and the rights of the respective parties.

Respectfully submitted,

J. KEITH MANN
Special Master

Stanford, California
March 1996

APPENDICES

APPENDIX A
TEXT OF QUESTIONS PRESENTED

**Joint Statement of Questions Presented and Contentions
of the Parties (May 1980)**

Question 1: Should Alaska's Motion for Leave to File its Counterclaim be granted?

Question 2: Should the extent of Alaska's submerged lands in the leased area be determined on the basis of "straight baselines"?

Question 3: Do the submerged lands between the mainland and the barrier islands in the leased area (including areas more than three miles from any upland) belong to Alaska on the ground that they underlie inland waters?

Question 4: If they do not underlie inland waters of Alaska, do the submerged lands between the mainland and the barrier islands in the leased area which are more than three miles from any upland, but are totally surrounded by submerged lands owned by Alaska, belong to Alaska on the ground that they lie within Alaska's most seaward contiguous boundary?

Question 5: Is the formation known as Dinkum Sands an island constituting part of Alaska's coast line for purposes of delimiting Alaska's offshore submerged lands?

Question 6: Should the extension of the Arco Pier constructed in 1976 be considered a part of the mainland for the purposes of measuring the three-mile Submerged Lands Act grant to Alaska in this portion of the leased area (assuming the submerged lands involved do not belong to Alaska on some other basis).

Question 7: Are Harrison Bay and Smith Bay part of National Petroleum Reserve-Alaska?

Question 8: Is Peard Bay part of National Petroleum Reserve-Alaska?

Question 9: Did the application for withdrawal and crea-

tion of the Arctic Wildlife Range, filed in 1958 but not finally confirmed until 1960, effectively withhold from Alaska any offshore submerged lands included within the application?

Question 10: Assuming the acreage included in the 1958 application for the Arctic Wildlife Range was effectively withheld from Alaska, does the Range embrace the submerged lands between the mainland and the barrier islands in the area between the Canadian boundary and Brownlow Point?

Supplement to Joint Statement of Questions Presented and Contentions of the Parties (September 1980)

Question 11: Are the submerged lands within Wainwright Inlet and the Kuk River, Kugrua Bay and River, and other small inlets, bays and river estuaries, between Icy Cape and Point Barrow and between Point Tangent and the Colville River, within the boundary of the National Petroleum Reserve-Alaska?

Question 12: Should the extent of Alaska's offshore submerged lands between Icy Cape and the Canadian border, not included within the "leased area," be determined on the basis of "straight baselines"?

Question 13: Should the extent of Alaska's offshore submerged lands between Icy Cape and the Canadian border, not included within the "leased area," be determined on the basis that the waters between the mainlands and the barrier islands are inland waters, even if the "straight baseline" contention is not accepted?

Second Supplement to Joint Statement of Questions Presented and Contentions of the Parties (July 1984)

Question 14: Are certain geographic features within the Beaufort Sea, which appear on nautical charts published by

the federal government but not on maps prepared by the State of Alaska in 1981 and 1982, to be deemed low-tide elevations and thus salient points from which the submerged-lands grant to Alaska is to be measured?

Question 15: Is the southern portion of the area shown as "Harrison Bay" on NOS chart 16064 a juridical bay, and if so, what is the location of the line enclosing the inland waters of the bay, from which the 3-mile grant to Alaska is to be measured?

APPENDIX B
REPORT OF JANUARY 10, 1984

No. 84, Original

In the Supreme Court

OF THE

United States

—
OCTOBER TERM, 1983
—

UNITED STATES OF AMERICA,
Plaintiff,

v.

STATE OF ALASKA

**REPORT OF SPECIAL MASTER ON MOTION OF
INUPIAT COMMUNITY OF THE ARCTIC SLOPE
AND UKPEAGVIK INUPIAT CORPORATION
FOR LEAVE TO INTERVENE**

J. KEITH MANN
Special Master

January 10, 1984

No. 84, Original

In the Supreme Court

OF THE

United States

OCTOBER TERM, 1983

UNITED STATES OF AMERICA,
Plaintiff,

v.

STATE OF ALASKA

REPORT OF SPECIAL MASTER ON MOTION OF INUPIAT COMMUNITY OF THE ARCTIC SLOPE AND UKPEAGVIK INUPIAT CORPORATION FOR LEAVE TO INTERVENE

INTRODUCTION

This Interim Report is confined to the Motion to Intervene filed on May 12, 1981, by the Inupiat Community of the Arctic Slope and the Ukpeagvik Inupiat Corporation and referred by the Court to its Special Master on June 8, 1981. 452 U.S. 913.

For the reasons elaborated herein, the Master has concluded that limited intervention should be permitted and submits his recommendations accordingly. *Infra*, pp. 41-42. With the concurrence of all parties, however, it is respectfully suggested that the Court not now review these recommendations, and instead, merely order the present Report filed, allowing the parties, or any of them, to file exceptions if so advised at the conclusion of the case when the Master's final Report is submitted.

This course has recommended itself to the parties and the Special Master so as to avoid delay in the completion of the hearing. The parties have agreed upon a schedule for further proceedings, approved by the Master, which (although it may have to be revised in limited respects) would have to be set aside, causing perhaps a year's postponement, if the Court were to undertake review of the Report on Intervention in this Term. On the other hand, given the very limited scope of the intervention allowed, it is not anticipated that treating the applicants as parties for the remaining proceedings before the Master will impose a substantial additional burden or cause delay.

In these circumstances, it seems appropriate to follow the procedure the Court accepted in *Arizona v. California*, 444 U.S. 1009 (1980). There, the Special Master reported to the Court his intention to permit five Indian Tribes to intervene in the proceedings before him, and the Court declined immediately to review that ruling, notwithstanding the plea of the State parties. This was, however, without prejudice to the right of the State parties to challenge tribal intervention at the conclusion of the case. See *Arizona v. California*, No. 8, Orig., 103 S. Ct. 1382 (1983).

DISCUSSION

The body of this report is organized as follows: first, the background of the litigation and of the motion for intervention is presented; second, Alaska's claim that the State's sovereign immunity bars intervention is considered; third, the implications of the Federal Rules of Civil Procedure are discussed; and finally, the special nature of original jurisdiction lawsuits and the circumstances of this case are examined to determine if an outcome should be reached

different from that suggested by the Federal Rules of Civil Procedure.

I

BACKGROUND OF LITIGATION

In 1979, the Supreme Court exercised its original jurisdiction under Article III, § 2 of the United States Constitution to hear this case, which relates to the location of the northern boundary of the State of Alaska. 442 U.S. 937 (1979). Alaska replied to certain of the United States' claims regarding the "Dinkum Sands" area with counterclaims relating to the Arctic National Wildlife Range and the National Petroleum Reserve-Alaska. After these preliminary pleadings were filed, the Court referred the United States' complaint to the Special Master. 444 U.S. 1065 (1980). Alaska's motion for leave to file the counterclaim was also subsequently referred to the Special Master. 445 U.S. 914 (1980).

In May 1980, the parties submitted to the Master a *Joint Statement of Questions Presented* (hereinafter the "*Joint Statement*"). A hearing was held before the Special Master on July 28 and 29, 1980, at which time testimony was taken on issues regarding Alaska's counterclaims. In September 1980, the parties supplemented the *Joint Statement* with three additional questions.

On May 12, 1981, the Inupiat Community of the Arctic Slope, a federally recognized Indian tribe,¹ and the

¹So styled in the motion for leave to intervene and complaint in intervention. Alaska disputes the particular status. The original parties, seeking to avoid unintended collateral effect, suggest that the characterization be amended to read "federally recognized Alaska Native group."

Ukpeagvik Inupiat Corporation, a native village corporation, moved for leave to intervene in the case. On June 8, 1981, the Supreme Court referred the motion to the Master. 452 U.S. 913 (1981).

Briefs in opposition to the motion were filed by the United States and by the State of Alaska. The Amoco Production Company, *et al.*, high bidders in a joint federal-state lease sale in the disputed area, filed as *amici curiae* a brief in opposition to the motion. Movants filed a reply brief. Argument was held before the Master at Stanford, California on March 26, 1982, with the above parties and *amici* participating.

In their reply brief, movants adopted an alternative suggestion made by the United States in its brief, *Memorandum for United States*, p. 9, that movants' participation be limited to issues already before the Master but on which no testimony had yet been taken. At the hearing, movants specifically limited their motion to those questions presented by the parties in the *Joint Statement* and the supplement thereto but not heard at the hearing of July 28 and 29, 1980. *Record of Proceedings before the Special Master*, pp. 17-18. (Hereinafter cited as "*Record*.")

As counsel for the United States has observed, this limitation on the scope of the proposed intervention makes moot the claims of the United States, Alaska, and the *amici* that the intervention would raise new issues, or require the Master to reopen the record with respect to Alaska's counterclaims, which were considered at the hearing of July 28

and 29, 1980. *Record*, p. 24. The Master shares the concerns expressed that this litigation not become a pretext for hearing issues outside of the appropriate scope of a suit under the Court's original jurisdiction and that the proposed intervention not delay the progress of the case by requiring additional excursions into areas already explored. The statements of movants in the reply brief and at the hearing were therefore taken as effectively modifying the motion, and the following report is based upon the premise that the motion is limited to intervention with respect to those issues on which testimony has not yet been taken: *viz.*, Questions 2 through 5, 12, and 13 of the *Joint Statement* and the supplement which the parties have filed. Notwithstanding that there may be attempts by one or more of the parties to inject new issues into the litigation, the Master sees no basis for distinguishing this case from the myriad of cases in which limited intervention has been permitted.²

We also believe that if the motion as limited is granted, there is no reason that the Master and the Court will not be able to restrict the inquiry to claims already raised by the sovereigns, *cf. Utah v. United States*, 394 U.S. 89, 96 (1969), and therefore within the scope of the Court's jurisdiction already exercised over this matter.

²That such limitations are appropriate is clearly indicated in the Advisory Committee's Note to the 1966 amendment to Rule 24(a): "An intervention of right under the amended rule may be subject to appropriate conditions or restrictions responsive among other things to the requirements of efficient conduct of the proceedings." 39 F.R.D. 69, 111 (1966).

II

THE ELEVENTH AMENDMENT AND SOVEREIGN IMMUNITY

In its brief, Alaska argues that granting intervention would abrogate the sovereign immunity of states reflected in the Eleventh Amendment to the United States Constitution.³

At the hearing, however, Counsel for Alaska acknowledged that all the cases cited by the State in support of its view that intervention is barred by the Eleventh Amendment involved attempts to bring actions, rather than attempts to intervene in matters already properly before the court. *Record*, p. 34.⁴

The scope of the immunity doctrine was well summarized by the Court in *Monaco v. Mississippi*, 292 U.S. 313 (1934). There the Court stated that the extension of the immunity doctrine in *Hans v. Louisiana*, 134 U.S. 1 (1890) (to include suits by citizens of a state against that state) merely reflected the fact that immunity is presumed to exist unless surrendered "in the plan of the Constitution" (citing *The Federalist* No. 81 (A. Hamilton)). The Court illustrated its point by citing cases in which state sovereign immunity

³The Eleventh Amendment provides: "The judicial power of the United States shall not be construed to extend to any suit in law or equity, commenced or prosecuted against one of the United States by Citizens of another State, or by Citizens or Subjects of any foreign state."

⁴Counsel for Alaska also stated that "it is certainly not necessary from the State's standpoint that we get a ruling in the case that sovereign immunity is a bar to this type of intervention. We don't believe that it is essential as a matter of State's rights. . . ." *Record*, p. 35.

was held to bar suits by congressionally created corporations, *Smith v. Reeves*, 178 U.S. 436 (1900), or under the federal courts' admiralty jurisdiction, *ex parte New York* (No. 1), 256 U.S. 490 (1921), even though the Eleventh Amendment provided no explicit protection against such suits. In no case cited by Alaska has state sovereign immunity been held to bar intervention by a private party in a suit properly before the Court under its original jurisdiction.

In two cases in which a state has raised the sovereign immunity issue with respect to intervention, the Court has explicitly refused to address the issue and has denied intervention on other grounds. In *New Jersey v. New York*, 345 U.S. 369 (1953), Philadelphia had attempted to intervene in 1952 in a suit that had been commenced by New Jersey against New York in 1929, and in which the Commonwealth of Pennsylvania had intervened in 1930. The Court stated, "The view we take of the matter makes it unnecessary to decide whether Philadelphia's intervention in the pending litigation would amount to a ' . . . suit in law or equity, commenced or prosecuted against one of the United States by citizens of another State . . . ' in violation of the Eleventh Amendment." 345 U.S. at 372. The Court relied instead on the *parens patriae* doctrine to hold that Philadelphia's interests were adequately protected by Pennsylvania's presence in the suit.

In the *Utah* case, the Special Master had denied an attempt by Morton Salt, *inter alia*, to intervene in a dispute over the Great Salt Lake. The Master's decision was based on Utah's sovereign immunity claim. The Court stated, "[W]e affirm the Master's decision . . . for reasons which

are somewhat different from those advanced in the Master's Report. . . . "We do not find it necessary to reach the ground adopted in the Report." *Utah v. United States*, 394 U.S. 89 at 91-92 (1969). Instead, the Court denied intervention because a stipulation entered into by the parties to the suit so limited the issues as to eliminate Morton's direct interest in participation.

In addition to the two cases cited above, in which the Court refused to reach the issue, the Court has never erected a sovereign immunity bar in cases in which a state has objected to intervention but has not explicitly raised an Eleventh Amendment claim. See, e.g., *South Dakota v. Nebraska*, 434 U.S. 948 (1977) (intervention by South Dakota citizens permitted over South Dakota's objections).

Furthermore, the Court rejected an Eleventh Amendment claim in *Maryland v. Louisiana*, 451 U.S. 725 (1981). Although not speaking directly to Louisiana's Eleventh Amendment argument that seventeen private pipeline companies should not be permitted to intervene in a suit challenging Louisiana's "first-use" tax on natural gas, the Court noted "those companies have a direct stake in this controversy, and in the interest of a full exposition of the issues, we accept the Special Master's recommendation that the pipeline companies be permitted to intervene, noting that it is not unusual to permit intervention of private parties in original actions. See *Oklahoma v. Texas*, 258 U.S. 574 (1922)." 451 U.S. at 745, n. 21.

Finally, in *Arizona v. California*, 103 S. Ct. 1382 (1983) (No. 8 Orig.), the Court rejected Arizona and California's

attempt to interpose an Eleventh Amendment objection against the motion of several Indian tribes for leave to intervene. The Court distinguished *New Jersey*, 345 U.S. 369, on the ground that the *parens patriae* doctrine adopted therein was inapplicable to cases involving Indian tribes. Citing *Maryland v. Louisiana*, the Court concluded that "the Tribes do not seek to bring new claims or issues against the states. . . . Therefore, our judicial power over the controversy is not enlarged by granting leave to intervene, and the States' sovereign immunity protected by the Eleventh Amendment is not compromised." 103 S. Ct. at 1389 (1983).⁵

In light of the earlier cases, and prudential considerations reflecting a desire to use most economically the limited resources of the federal judiciary, we conclude that the Eleventh Amendment does not pose an absolute bar to intervention by private parties in lawsuits brought under the Court's original jurisdiction. There are certainly limits to the scope of complaints in intervention which can be

⁵We note also that Judge Tuttle, as Special Master in that case, dealt extensively with this issue in his *Memorandum and Report on Preliminary Issues*, August 28, 1979. In recommending intervention over the Eleventh Amendment objection, Judge Tuttle stated that "[O]nce a state is brought properly within federal jurisdiction—in this case by the bringing of a suit by another State—the Court may hear at least certain claims against the state"; and "The Supreme Court, once it has exercised its original jurisdiction over a suit involving sister states and the United States, may entertain the ancillary claims of non-sovereign litigants even though standing by themselves these claims would not be within the Court's original jurisdiction, *Texas v. Louisiana*, 416 U.S. 965 (1974), or even within federal jurisdiction, *Oklahoma v. Texas*, 258 U.S. 574, 581 (1922)." Tuttle, *Memorandum and Report on Preliminary Issues*, August 28, 1979 at 23, 21.

heard in the absence of an independent basis for federal jurisdiction; there are also special considerations which limit the sorts of claims the Court may wish to hear under its original jurisdiction. We find, however, that these limits are separate and distinct from Alaska's Eleventh Amendment claim, which the Master rejects.

III

THE FEDERAL RULES OF CIVIL PROCEDURE

Supreme Court Rule 9.2 states that the Federal Rules of Civil Procedure are to be used as a "guide" to procedure in original actions before the Court "where their application is appropriate." Actual practice by Special Masters has varied, however, from rigorous analysis (*see, e.g., Arizona v. California*, No. 8 Original, *Memorandum and Report on Preliminary Issues*, August 28, 1979), to casual reference (*see, e.g., South Dakota v. Nebraska*, No. 72 Original, *Report of Special Master of June 8, 1977*), to complete disregard (*see, e.g., Texas v. Oklahoma*, No. 85 Original, *Report of Special Master of January 23, 1981*). We interpret Rule 9.2 to indicate that application of the Federal Rules of Civil Procedure is appropriate unless there are overriding concerns arising out of the nature of the Court's original jurisdiction or out of the special circumstances of the case which mandate a different treatment from that which the Federal Rules would suggest. In other words, while there is no "intervention of right" in original jurisdiction proceedings, in the absence of overriding considerations, deference should be paid to the Rules.

Rule 24 provides for intervention on the following grounds:

(a) *Intervention of Right*. Upon timely application anyone shall be permitted to intervene in an action: . . . (2) when the applicant claims an interest relating to the property or transaction which is the subject of the action and he is so situated that the disposition of the action may as a practical matter impair or impede his ability to protect that interest, unless the applicant's interest is adequately represented by existing parties.

(b) *Permissive Intervention*. Upon timely application anyone may be permitted to intervene in an action: . . . (2) when the applicant's claim or defense and the main action have a question of law or fact in common. . . . In exercising its discretion the court shall consider whether the intervention will unduly delay or prejudice the adjudication of the rights of the original parties.

A. Permissive Intervention under Rule 24(b)

As Alaska correctly observes in its brief, "Permissive intervention ordinarily must be supported by independent jurisdictional grounds . . ." *Brief of the State of Alaska*, p. 14. Professors Wright and Miller comment as follows on the subject:

. . . [T]hat there must be independent jurisdictional grounds for permissive intervention under Rule 24(b), was sound law prior to 1966 and should continue to be the rule today, as indeed the courts have held [citing cases from the 1st, 3d, 4th, 7th, 8th, and 9th Circuit Courts of Appeal, and numerous District Court cases]. . . . The rule of complete diversity would be virtually obliterated, and the federal courts would be burdened with the decision of so many matters that are properly the business of the state courts, if so tenuous a connection as the existence of a common question of law

or fact were enough to dispense with ordinary requirements of jurisdiction and permit litigants to have their independent claims or defenses tried in federal court though, absent intervention, they would not have been able to do so. . . .

There were a few cases that said that independent jurisdictional grounds are not required even for permissive intervention. Those cases rely primarily on a broad statement by the Supreme Court, made long before the civil rules introduced the distinction between intervention of right and permissive intervention, and perhaps best understood only in the light of the case in which it was made. With so many decisions to the contrary, those few cases cannot be regarded as authoritative.

Wright & Miller, *Federal Practice & Procedure*, Civil § 1917 (1972).

Movants clearly could not claim independent jurisdictional grounds for their appearance in an original action before the Supreme Court. They themselves advance no such claim.

It could be argued that the "independent jurisdiction" requirement need not apply in original jurisdiction cases; indeed the concerns giving rise to the requirement seem to apply more directly to the setting of the district courts.* The oft-stated concern of the Court about unwarranted expansion of original jurisdiction, however, suggests the conclusion that in the absence of an independent jurisdic-

*Such a conclusion might be inferred from the dictum of the Court in *Arizona v. California* that the intervenors in that case "... at a minimum, satisfy the standards for permissive intervention set forth in the Federal Rules." 103 S. Ct. at 1389. The Court allowed intervention on other grounds, however, and did not fully develop the analysis.

tional basis (intervention by a state or by the United States), intervention under Rule 24(b) is unavailable.

In the absence of such an independent jurisdictional basis, it is not necessary to explore the substantive implications of Rule 24(b) for the case at hand.

B. Intervention of Right under Rule 24(a)

1. *Timeliness of the Motion.* Although both the United States and Alaska alleged in their briefs that the motion for intervention is untimely, having been filed nearly two years after the suit began, the limitation on the scope of intervention agreed to by the movants cures any problem which might have existed.

The federal courts have indicated that especial liberality is to be applied with respect to timeliness under Rule 24(a). *Alaniz v. Tillie Lewis Foods*, 572 F.2d 657, 659 (9th Cir. 1978), *McDonald v. E. J. Lavino*, 430 F.2d 1065, 1073 (5th Cir. 1970), *Diaz v. Southern Drilling*, 427 F.2d 1118, 1126 (5th Cir. 1970), *Walpert v. Bart*, 44 F.R.D. 359, 360-361 (D. Md., 1968).

Furthermore, the mere passage of time is not sufficient to make a motion untimely. *Legal Aid Society of Alameda Co. v. Dunlop*, 618 F.2d 48, 50 (9th Cir. 1980), *Diaz v. Southern Drilling*, 427 F.2d at 1125, *Finch v. Weinberger*, 407 F.Supp. 34, 41 (N.D. Ga., 1975). A showing of prejudice or other special circumstances, in addition to the mere passage of time, is necessary.

By eliminating the possibility that matters already heard would have to be reopened, the limitation on the scope of

intervention accepted by the movants in their Reply Brief resolves the issue of any prejudice which could have arisen by intervention at this late date.⁷ In the absence of prejudice, and given the limitations to which movants have agreed, timeliness is not an issue here.

2. *Nature of Movants' Interest.* Movants claim that they hold unextinguished sovereign rights over portions of the territory that is the subject of this lawsuit between the United States and Alaska. They are prosecuting those claims in another forum, *Inupiat Community v. United States*, Civ. Action No. A81-019 (D. Al.) filed 1/19/81, *motion by defendants for judgment on the pleadings* granted 10/1/82, *Notice of Appeal* filed 11/29/82. Under the terms of the Alaska Native Claims Settlement Act (hereinafter "ANCSA"), 43 U.S.C. §§ 1601-1628, native claims "within Alaska" were extinguished. Movants assume *arguendo* that ANCSA is valid and that offshore areas that are deemed to be within Alaska's territorial water are within the meaning of the phrase "within Alaska" as it is used in ANCSA.

Given these assumptions, movants claim that their interest in the disputed territory, and their ability to advance that interest in the District Court and Court of Appeals, will be damaged to the extent that this case results in the awarding of territory to Alaska, because of the extinguishment provisions of ANCSA; in other words, to the extent

⁷The parties and amici also have expressed concern that intervention might retard the progress of the litigation. While it is our belief that intervention can occur without causing any undue delay in the case, we note that concern with delay (as opposed to untimeliness) arises only under Rule 24(b) and thus is not explicitly relevant to the Rule 24(a) analysis.

the United States prevails here, more territory will be available for native claims in an alternative form. Movants argue that the effect of ANCSA, combined with Alaska's claims in this lawsuit, constitute sufficient practical impairment or impediment to their ability to protect their interest to warrant intervention under Rule 24.

The parties and amici respond to these claims with two principal arguments. Amici argue that the complaint as filed in the District Court, and which is the basis of the interest for whose protection intervention is sought, and in which judgment was granted on the pleadings, is "patently without merit." Amici conclude that therefore "the complaint in intervention lacks the 'seriousness and dignity' to deserve filing before the Court." (*Brief of Amoco Production Company, et al.*, pp. 7-8.)

The United States and Alaska do not go quite so far. Counsel for the United States argued at the hearing that granting intervention might "be seeming to give substance to the claim [of the movants] and thereby . . . trespassing on the proceedings before the District Court . . ." "[G]ranting intervention might imply a holding [that movants' underlying claim is valid] . . . and prejudice the district court proceedings." To deny intervention would result in "remaining entirely neutral as to the viability of these claims. . . ." *Record*, p. 25.

Counsel for Alaska reiterated the point. "Granting intervention . . . as a necessary predicate requires almost a finding that their interest is substantial. . . ." "Denying intervention would avoid that problem of giving tacit recognition to their interest." *Record*, pp. 31-32.

The bulk of precedents under Rule 24 go in a diametrically opposite direction from the view advanced by Counsel for the parties and for *amici*.

Beginning with *Atlantis Development Corp. v. United States*, 379 F.2d 818 (5th Cir. 1967), numerous cases have held that it is not appropriate for a court to inquire into the legitimacy or scope of the interest at stake in a motion for intervention and that *stare decisis* itself may provide a significant enough impediment to the enforcement of interests to warrant intervention.

Atlantis is so strikingly similar in its factual setting to the instant case that it merits a close look. In *Atlantis*, the Atlantis Development Corp. sought to intervene in a suit by the United States against, *inter alia*, Acme Development Corp. over title to various offshore coral reefs. Atlantis claimed that it in actuality owned the reefs on which Acme had attempted a construction project, and its claim was therefore adverse to both Acme's and the United States'. Particular attention should be paid to the following from Judge John R. Brown's opinion:

The Government would avoid all of these problems [of intervention] by urging us to rule as a matter of law on the face of the moving papers that the intervenors could not possibly win on the trial of the intervention and consequently intervention should be denied.

... [I]t is, of course, conceivable that there will be some instances in which the total lack of merit is so evident from the face of the moving papers that denial of the right of intervention rests upon a complete lack of a substantial claim. But it hardly comports with good administration, if not due process, to determine the merits of a claim ... by denying access to the court

at all. This seems especially important when dealing with interests in the outer Continental Shelf. . . . If in its claim against the defendants in the main suit, these questions [regarding U.S. jurisdiction over the Continental Shelf] are answered favorably to the Government's position, the claim of Atlantis for all practical purposes is worthless [because *stare decisis* would make it impossible for Atlantis effectively to raise its claim against the U.S. in another court].

379 F.2d at 827-828.

It is worthy of note that the movants would be bound by more than *stare decisis* with respect to land adjudicated to be Alaska's in this case, because under ANCSA the intervenors would have no claim at all. The *Atlantis* court concluded that "*stare decisis* may . . . supply that practical disadvantage which warrants intervention of right." 379 F.2d at 829.

Atlantis has been widely followed both with respect to the level of inquiry into the nature of the interest asserted and with respect to the holding that *stare decisis* provides the necessary impediment to warrant intervention. Regarding the latter, see *Nuesse v. Camp*, 385 F.2d 694, 702 (D.C. Cir. 1967), *Martin v. Traveler's Indemnity Company*, 450 F.2d 542, 554 (5th Cir. 1971), and *Francis v. Chamber of Commerce of United States*, 481 F.2d 192, 195 n.8 (4th Cir. 1973). In *Corby Recreation Inc. v. General Electric Company*, 581 F.2d 175, 177 (8th Cir. 1978), the court stated, "The inhibiting effect of *stare decisis*, coupled with assertion [by the intervenor] of an interest nearly identical to and perhaps in conflict with that alleged by *Corby* in the main action, furnishes the practical disadvantage required

for intervention as a right." (Citing *Francis*, *Nuesse*, and *Atlantis*.)

With respect to the nature of the interest required to justify intervention, in *Corby* the court also asserted that "[T]he well-pleaded allegations of [the intervenor's] complaint [must be] accepted as true," citing *Kozak v. Wells*, 275 F.2d 104 (8th Cir. 1960). 581 F.2d at 177.

In the *Kozak* case Justice (then Judge) Blackmun had written for a unanimous three-judge panel:

For purposes of judging the satisfaction of these conditions [of Rule 24] we look to the pleadings, that is, to the motion for leave to intervene and to the proposed complaint or defense in intervention, and, absent sham and frivolity, we accept the allegations in those pleadings as true.

"The question of a petition to intervene is whether a well-pleaded defense or claim is asserted. Its merits are not to be determined. The defense or claim is assumed to be true on motion to intervene, at least in the absence of sham, frivolity, and other similar objections." *Otis Elevator Co. v. Standard Construction Co.*, D.C.D.Minn., 10 F.R.D. 404, 406.

"For the purposes of a motion to permit intervention, all allegations in the pleading, which the intervenors propose to serve when they are made parties to the action, must be deemed to be true." *Kaufman v. Wolfson*, D.C.S.D.N.Y., 137 F. Supp. 479, 481.

Clark v. Sandusky, *supra*, at page 918 of 205 F.2d; *Dalva v. Bailey*, D.C.S.D.N.Y. 158 F. Supp. 204, 207. Whether the allegations are eventually proved is beside the point for we are now concerned only with the question of right to intervene and not with ultimate results on the merits.

A Florida District Court had occasion to reexamine the issue of the permissible degree of inquiry into the merits of an intervenor's allegations in *Florida Power Corp. v. Granlund*, 78 F.R.D. 441 (M.D.Fla. 1978). Florida Power sought to block the State of Florida from intervening in an antitrust suit over oil purchases. In response to Florida Power's contention that the state lacked the requisite "interest" to justify Rule 24 intervention, the Court wrote,

The Court is not without guidance. Such is provided by the Fifth Circuit's decision in *Atlantis Development Corp. v. United States*, 379 F.2d 818 (5th Cir. 1967). There the party opposing intervention urged the Fifth Circuit Court of Appeals to rule on the basis of the moving papers that the intervenors could not possibly win at trial—in effect, to examine the complaint as would be done under Rule 12(b)(6), Fed.R.Civ.P. This the Fifth Circuit refused to do. [Quoting the passage quoted at pp. 16-17, *supra*.]

Thus, regarding whether the complaint states a claim, the Court's obligation in circumstances such as these is limited to determining whether "total lack of merit is . . . evident from the face of the moving papers . . ." *Id.*

The State presents a number of claims in its intervening complaint; the Court cannot say that any of them on their face exhibit such a "total lack of merit."

78 F.R.D. at 443.

The cases discussed above represent but one view of the "interest" question, however. A second line of cases has developed along an alternative line. These basically turn on a distinction between those interests which are "direct" and those which are "contingent." The very nature of such

an inquiry is antithetical to the approach of *Atlantis* and its progeny.

The seminal case in this line is *Kheel v. American Steamship Owner's Mutual Protection & Indemnity Assn.*, 45 F.R.D. 281 (S.D.N.Y. 1968). In *Kheel* the court stated, "Movants, who are but five out of 120 negligence claimants, do not assert that they have proved their claims or reduced them to judgment." "The mere existence of a third person's contingent interest in the outcome of pending litigation is insufficient to warrant intervention." 45 F.R.D. at 284.*

Clearly the emphasis placed by *Atlantis* and following cases on *stare decisis* as an impediment to vindication of an interest is irrelevant to the reasoning of *Kheel*. In *Atlantis* and its progeny, the fact that an additional lawsuit would

**Kheel* was favorably cited in *Liberty Mutual Insurance Co. v. Pacific Indemnity Co.*, 76 F.R.D. 656 (W.D.Pa. 1977). The Liberty Mutual court wrote,

The courts have agreed that the interest required must be a "direct, substantial, legally protectable interest in the proceedings," *Hobson v. Hansen*, 44 F.R.D. 18, 24 (D.D.C. 1968). . . . The interest must be a "present substantial interest as distinguished from a contingent interest or mere expectancy," [citation]. "[A]n interest, to satisfy [Rule 24(a)] must be significant [and] must be direct rather than contingent [citation]."

Analysis of cases involving interests factually similar to [the instant case] reveals that an interest contingent upon a favorable result in an *associated* lawsuit is not an interest sufficient to require intervention under Rule 24(a).

76 F.R.D. 656, 658 (1977).

Liberty Mutual involved an attempt of a state court personal injury plaintiff to intervene in a federal diversity suit between insurance companies attempting to sort out their respective obligations under overlapping insurance policies.

be required to vindicate the interest, and the fact that *stare decisis* would affect that subsequent litigation, was the basis for permitting intervention. In *Kheel*, the fact that a subsequent lawsuit would be required, and the implied "contingent" nature of the claim asserted in the petition for intervention, became the basis for denying intervention.

There seems to be no sure way to distinguish those cases in which the *Atlantis* logic is to be applied, and those to which *Kheel* is more applicable, although the *Kheel* court made much of the fact that only legal issues remained at the time intervention was sought. Indeed, we find no case in which a reconciliation of the two approaches is attempted. In *Atlantis*, Judge Brown did indicate that the *stare decisis* rule might be most appropriately applied when the subsequent claim might be against one of the parties to the original action, as in the instant case, and might stand on the same bases as one of the original claimants. Judge Brown surmised that in such a case "[t]he Court before whom the potential parties in the second suit must come [to petition to intervene] must itself take the intellectually straightforward, realistic view that the first decision will in all likelihood be the second and the third and the last one." 379 F.2d at 829. Because of the unique circumstances of ANCSA, that reasoning applies here perhaps to an even greater extent than it did in *Atlantis*.*

*As Counsel for the United States conceded at the hearing "[a] decision by the Supreme Court of the United States fixing the boundary, I think, in the real world sets a precedent which would effectively bar any further evidence on that question. . . . [i]f the United States were not adequately representing their interests as far as the interest of the Intervenor, it would be right to allow them to speak for themselves." *Record*, p. 29. (See *infra* p. 22, regarding the issue of adequacy of representation.)

There are literally dozens of cases of proposed interventions which have been decided on the "interest" question. As Judge J. Skelly Wright wrote in *Nuesse*, "we know of no concise yet comprehensive definition of what constitutes a litigable interest for purposes of standing and intervention under Rule 24(a)." "[T]he interest test is primarily a practical guide to disposing of lawsuits by involving as many apparently concerned persons as is compatible with efficiency and due process." 385 F.2d at 700.

While we have noted the rejection by the District Court of movants' claims, in the absence of a final judgment in that matter we are not in a position fairly to conclude that those claims are "totally without merit" as *amici* would have us do, or represent "sham or frivolity" as Judge Blackmun suggested in *Kozak* would be necessary. On the basis of the precedents, we believe that an analysis under Rule 24 leads to the conclusion, contrary to the assertions of Counsel for the parties and for *amici*, that a denial of intervention for lack of an interest is a greater statement on the merits than is permitting intervention. We do not share the suggestion that permitting intervention will somehow improperly influence proceedings before another tribunal. If such were the case, however, the remedy lies with an appeal of that court's decision, not with an improper resolution here of the petition for intervention. We conclude that movants adequately meet the "interest" test of Rule 24(a).

3. *Adequacy of Representation.* Under the analysis thus far presented, Rule 24(a) would mandate intervention "unless the applicant's interest is adequately represented by existing parties." As noted earlier, for the United

States, as well as for movants, this issue is at the crux of the motion.¹⁹

Movants concededly seek the same result in this lawsuit as does the United States: a minimization of the territory that is deemed to be Alaska's, and that therefore would be, from movants' perspective, unreachable because of ANCSA.

Movants nevertheless attack on several grounds the ability of the United States to represent their interests adequately. Included among these are that movants and the United States are in an ultimate sense adversely situated with respect to the ownership of the territory; that the United States may wish to settle the dispute in a manner adverse to movants, to save litigation costs, because of various international law concerns not directly relevant to this case, or because of a desire to eliminate movants' ability to prosecute their claims in another forum; and that as a matter of law the United States is an unsuitable representative for Native-American petitioner-intervenors.

Rule 24(a), as noted, requires that intervention be permitted when certain specified conditions are met "unless the applicant's interest is adequately represented by existing parties." Prior to 1966, the Rule had required intervention "when the representation of the applicant's interest by existing parties is or may be inadequate."

Numerous cases have concluded that the 1966 amendment to the Rule shifts the burden of persuasion to the party

¹⁹See statement of Deputy Solicitor General Claiborne cited at n.9 *supra*.

opposing intervention and is designed to make intervention more freely available.¹¹ See, e.g., *Nuesse*, 385 F.2d at 702.

The Supreme Court, in *Trbovich v. United Mine Workers*, 404 U.S. 528 (1972), took a slightly different approach and stated that the Rule's requirement "is satisfied if the applicant shows that representation of his interest 'may be' [paraphrasing the pre-1966 version of the Rule] inadequate and the burden of making that showing should be treated as minimal." 404 U.S. at 538, n. 10.

The mere fact that a petitioner-intervenor seeks the same result in a lawsuit as a party, or seeks to prosecute a claim against the same defendant, does not result in and of itself in a finding of adequate representation. In *Trbovich*, for instance, the Secretary of Labor had brought suit to set aside an allegedly improper union election. *Trbovich*, a union member, moved to intervene "(1) to urge two additional grounds for setting aside the election, (2) to seek certain specific safeguards with respect to any new election that may be ordered, and (3) to present evidence and argument in support of the Secretary's challenge to the election." 404 U.S. at 529-530. The Court reasoned from the statute that the interests of *Trbovich* and the Secretary were "related, but not identical," 404 U.S. at 538, and permitted intervention.

Justice Blackmun, as a Circuit Court judge, wrote in a classic formulation that inadequacy of representation may be shown "by proof of collusion between the representative

¹¹We note there have been dissenting voices on the subject. *Edmunson v. Nebraska ex rel. Meyer*, 383 F.2d 123 (8th Cir. 1967) and *In the Matter of American Beef Packers Inc.*, 457 F. Supp. 313 (D.Neb. 1978).

and an opposing party, by the representative having or representing an interest adverse to the intervener, or by the failure of the representative in the fulfillment of his duty." *Stadin v. Union Electric Co.*, 309 F.2d 912, 919 (8th Cir. 1962), cert. den., 373 U.S. 915 (1963).¹²

The *Stadin* formula has been used as a "strict test" to be applied when "the interest of the applicant and existing plaintiff are precisely identical" in the suit in which intervention is sought, but differ in terms of ultimate objectives. See *Pierson v. United States*, 71 F.R.D. 75, 78 n.5 (D.Del., 1976), *Walden v. Elrod*, 72 F.R.D. 5, 10 (W.D. Okla., 1976), and *United States v. I.B.M.*, 62 F.R.D. 530, 537-538 (S.D. N.Y., 1974). These courts would limit the *Trbovich* "minimal burden" test to cases in which the petitioner-intervenor and the alleged representative have adverse interests in the very suit in which intervention is sought. The distinction between identity of interest in the lawsuit in which intervention is sought, and "ultimate" identity of interest, is crucial to the analysis.

One perspective takes a very narrow view of identity. In *Atlantis*, the court stated, "On the basis of the pleadings [and the court then cited *Kozak* and *Stadin*, regarding the need to accept the pleaded allegations as true], Atlantis is without a friend in this litigation. The Government turns on the defendants and takes the same view both administratively and in its brief here toward Atlantis. The defendants, on the other hand, are claiming ownership in and the

¹²Judge Blackmun's opinion was written before the 1966 rule change, reducing or shifting the burden of proof with respect to showing inadequacy.

right to develop the very islands claimed by Atlantis." 379 F.2d at 825.

The existing defendants in *Atlantis* were in fact advancing the very same arguments that Atlantis wanted to; Atlantis was permitted to intervene precisely because a Government victory over the defendants would have, by *stare decisis*, made it difficult for Atlantis to advance similar claims against the Government in a subsequent lawsuit.

The logic of *Atlantis* has been followed in several subsequent cases. In *Diaz v. Southern Drilling*, the court stated:

[A]ppellant asserts that the rights of the Government are adequately protected by the existing parties to the main action. We disagree. Appellant is correct in stating that the Government is adequately represented as to the issue of Trefina's recovery from Southeastern. Trefina entered the suit with the sole purpose of effecting this recovery. Nonetheless, the argument is lacking in merit. Appellant ignores the fact that no existing party to the suit views the Government's tax lien favorably. Certainly Trefina does not. When the supposed representative actually represents an interest adverse to the intervenor, the representation is obviously not adequate.

427 F.2d at 1125.

In the *Corby* case, cited earlier, the court stated, "Western and Corby assert seemingly conflicting damage claims, and Western alleges that Corby was negligent and breached its lease by under-insuring the property. Such adversity of interest meets the . . . 'minimal' requirement of showing that representation of the potential intervenor's interest may be inadequate [citing *Trbovich*]." 581 F.2d at 177. Intervention was therefore permitted.

In *New Mexico v. Aamodt*, 537 F.2d 1102 (10th Cir. 1976), the United States intervened as plaintiff on its own behalf as owner of the Santa Fe National Forest, and in a fiduciary capacity on behalf of four Indian Pueblos, in a suit brought originally by New Mexico in an attempt to have the Pueblos' water rights declared subject to New Mexico's system of water rights adjudication. From the sketchy details provided in the opinion it would appear the United States was advancing the same claim on both its own behalf and on behalf of the Pueblos: that *none* of the water involved was subject to state law. The Commissioner of Indian Affairs had recommended that the Pueblos retain private counsel, but the United States objected. The Court of Appeals stated:

The claim that the Pueblos are adequately represented by government counsel is not impressive. Government counsel are competent and able but they concede that a conflict of interest exists between the proprietary interests of the United States and of the Pueblos. In such a situation, adequate representation of both interests by the same counsel is impossible.

537 F.2d at 1106.

In three of the above-described cases (all except *Aamodt*), the factor which blocked "adequate representation" was based on the difficulty of enforcement of the interest in a subsequent lawsuit, coupled with an evaluation of the importance of allowing those affected by a decision to speak for themselves. Within the cases themselves, no conflict of interest existed. In *Atlantis*, *stare decisis* was deemed to bar for all practical purposes a subsequent suit by Atlantis if Atlantis' alleged representatives were to lose their own suit. A similar problem was cited in *Corby*, 581

F.2d at 177, as well as the fact that Corby itself had indicated that it did not feel it could adequately represent the intervenor's interests.

The view that adequacy of representation may be dependent on whether the parties are *ultimately* adverse to each other thus seems to grow out of the view that subsequent lawsuits may not be readily available to enforce any interest that exists.

On the other hand, some courts have refused to acknowledge the need for (or unavailability of) a subsequent lawsuit as a basis for finding inadequacy of representation.

MacDonald v. United States, 119 F.2d 821 (9th Cir. 1940), involved a suit by the government against a railroad regarding ownership of subsurface minerals within the railroad's right-of-way. MacDonald claimed that as holder of a homesteading patent, he in fact was the owner of the minerals, and sought to intervene. The court stated:

Subdivision (a) of Rule 24, permitting intervention as a matter of right, provides, so far as pertinent here, that the application shall be granted "when the representation of the applicant's interest by existing parties is or may be inadequate and the applicant is or may be bound by a judgment in the action." Both conditions must be shown to exist. There is no reason to believe that the government's representation of MacDonald's interest is inadequate here, or that it was inadequate below. For that matter, both here and below, he presented an elaborate brief on the merits of the case and was heard thereon as fully as though he had been allowed to intervene. On the whole, the government would seem to have a vastly greater interest in the success of its suit than the intervenor.

119 F.2d at 827.

It is clear that the court was not impressed with the fact that by *stare decisis* the intervenor would have been unable to press his claim against the railroad if the United States should lose its suit, because it found that "for the purpose of the suit the two interests were identical." 119 F.2d at 827.

The *MacDonald* court's approach was seemingly adopted in *International Tank Terminal Ltd. v. M/V Acadia Forest*, 579 F.2d 964 (5th Cir. 1978). The court stated, "It is clear from our summary of the interrelationships among the five companies involved here that the appellant and the defendants have the same objective in the present suit. The possibility that future arbitration might occur in which the interests of the defendants and the [intervenor] might clash does not demonstrate the necessary adverse interest in the present suit." 579 F.2d at 968.

The decision in *International Tank* relies upon *Virginia v. Westinghouse*, 542 F.2d 214 (4th Cir. 1976). The operative language in *Virginia*, cited by the court in *International Tank*, is, "When the party seeking intervention has the same ultimate objective as a party to the suit, a presumption arises that its interests are adequately represented. . . ." 542 F.2d at 216. We are therefore left with the task of determining what is meant by the term "ultimate objective." A close reading of *Virginia*, which involved an attempt by the Commonwealth of Virginia to intervene in Virginia Power's uranium pricing suit against Westinghouse, shows that the *Virginia* court looked at "ultimate interest" in a sense that went beyond the existing lawsuit. *International Tank* would thus appear to be a misreading of *Virginia*.

The *MacDonald* and *International Tank* view is urged upon the Master by the parties in this case who oppose intervention. The *Atlantis*, *Diaz*, *Corby*, and *Aamodt* view stands in stark contrast.

It seems clear that *Atlantis* and the cases which follow it were decided as they were because (1) the courts looked to the ultimate relationship of the intervenor and the representative, rather than to their relationship "for purposes of the suit"; and (2) these courts would impose a virtually irrebuttable presumption of inadequacy when the intervenor would be effectively and permanently blocked from asserting his interest if the representative were to lose his lawsuit. One cannot deny, however, that *Atlantis* and *MacDonald* reach opposite conclusions in similar factual settings. The Master believes that the *Atlantis* court's view more accurately represents the law.

Notwithstanding the irreconcilability of *Atlantis* and *MacDonald*, a genuine issue nevertheless remains with respect to the applicable standard when a petitioner-intervenor and its "representative" have identical interests in the pending lawsuit, but are adverse in an "ultimate" sense.

We find appealing the resolution proposed by the courts cited on page 25, *supra*: when the parties are adverse in the pending lawsuit, the "minimal burden" test of *Trbovich* applies; when the parties are adverse only in an "ultimate" sense, Judge Blackmun's test in *Stadin* applies. Judge Edelstein has referred to this test as the "outcome-interest" test, and it certainly would seem to explain decisions such as *Atlantis* and cases which followed it. *U.S. v. I.B.M.* 62 F.R.D. at 538.

Professor David Shapiro takes a similar view in an oft-cited 1968 article, *Some Thoughts on Intervention Before Courts, Agencies, and Arbitrators*, 81 Harv. L. Rev. 721 (1968). Professor Shapiro did not directly address the distinction between adversity in the context of the existing lawsuit and "ultimate adversity," but approached the matter somewhat obliquely:

[A]dequacy of representation is a very complex variable indeed. At one extreme, when the applicant is seeking to assert his own separate claim for relief against one of the parties, it is not really an issue at all. At the other extreme, when the applicant is making no claim of his own but is seeking to assert the same position as one who is already a party and whose interests precisely coincide with his, the issue of adequacy should be, as Mr. Justice Stewart suggests, limited to questions of competence, collusion, and bad faith. But between these poles lies a substantial area where the question of adequacy is closely tied to that of interest. In these cases the applicant wants not to make his own claim but to support or supplement the position of one of the parties *whose stake in the proceeding differs from his*, though there may be no conflict of interest between them. The court's judgment in such cases should be influenced in part by the extent of the applicant's interest—do considerations of fairness strongly suggest that he be heard on a matter of this importance to him—and in part by the contribution that he can make to the court's understanding of the case in the light of his knowledge and concern.

81 Harv. L. Rev. at 748 (emphasis added, footnotes omitted).

The analysis suggested by Professor Shapiro and by the *I.B.M.*, *Pierson*, and *Walden* courts cited above can be readily applied to the instant case.

As noted above at p. 23, both movants and the United States have a similar object with respect to the case at bar: minimization of the territory adjudged to be Alaska's. Thus, they lack adversity of interest in the pending lawsuit, and the three-part *Stadin* test must be applied.

The first part of the test concerns "collusion." We find movants' claims on this score unconvincing. The fact that the parties made an agreement for a joint lease sale of mineral rights and for judicial resolution of the dispute does not make a case of collusion. Nor do we find a shred of credible evidence that the United States would collaborate with Alaska in order to prevent movants from pursuing their claims. Accordingly, we reject any attempt to prove inadequacy of representation on the basis of collusion.

The third element of the *Stadin* test—nonfeasance—is likewise clearly inapplicable here, as the United States is present, and makes every indication that it intends to pursue its claims.

The second element in the *Stadin* test—adversity of interest—is by far the most complex. It has already been established that with respect to the ostensible goals of the United States and movants there is no adversity of interest within the context of the case at bar. The issue then, to follow Professor Shapiro's prudential concern, is whether intervention is warranted because their interests are sufficiently adverse in the ultimate sense, and the movants' interest sufficiently important to them that they be allowed to speak for themselves.

In the present case, both the United States and the movants have adverse claims to the same territory. Movants and the United States are currently opposing parties in a lawsuit in another forum regarding that territory. The United States concedes that "if the United States were not adequately representing their interests . . . it would be right to allow them to speak for themselves."¹³ Yet movants argue vigorously that they have evidence to present to bolster the claims of the United States in this forum, but which they contend the United States will not use because the United States' case against movants before another tribunal might be damaged by presentation of that evidence.

We think these allegations meet the test. The claims of movants, accepted *arguendo* as valid, and the type of adversity of interest that is alleged, fall well within the requirements laid out in numerous cases cited and quoted above, including *Atlantis*, *Diaz*, *Corby*, and *Aamodt*.

This view is bolstered by the Court's recent conclusions in *Arizona v. California*. The Court stated, in permitting intervention over the States' objections, "The Tribes' interests . . . have been and will continue to be determined in this litigation since the United States' action as their representative will bind the Tribes to any judgment. Moreover the Indians are entitled 'to take their place as independent qualified members of the modern body politic.' " 103 S. Ct. at 1389. (Citations omitted, emphasis added.) If the Indians' right to intervene is vindicated when the United States has sued as trustee, as in *Arizona v. Cali-*

¹³See note 9 *supra*.

fornia, it ought to be vindicated when the United States is suing solely on its own behalf.

Alaska argues that when the Government is allegedly adequately representing the interest of a petitioner-intervenor, a special burden is imposed to overcome a presumption of adequacy. *Brief of the State of Alaska* p. 13. This principle was described by Justice Stewart, in his dissent to the Court's grant of intervention in *Cascade Natural Gas Corporation v. El Paso Natural Gas Company*, 386 U.S. 129 (1967), as follows: "It has been the consistent policy of this Court to deny intervention to a person seeking to assert some general public interest in a suit in which a public authority charged with vindication of that interest is already a party." 386 U.S. at 149-150. With but one exception, all of Justice Stewart's citations, however, are to public interest cases involving antitrust, civil rights, environmental protection, or utility regulation statutes.¹⁴ We find the doctrine inapplicable to the case at bar, in which the Government is a party to protect its property interests rather than to assert a general public interest, and in which intervention is sought solely to preserve private rights.

We conclude that movants' claims are not adequately represented by the United States and that movants therefore meet the requirements of Rule 24(a).

¹⁴The exception is *MacDonald v. United States*, 119 F.2d 821, the facts of which are inapposite to the rationale described by Justice Stewart. Professors Wright and Miller, whom Alaska cites as the source of their claim on this score, cite the same cases as had Justice Stewart, including the apparently misplaced reference to *MacDonald*. Wright and Miller, *Federal Practice and Procedure Civil* § 1909 (1972).

IV

SPECIAL STANDARDS FOR INTERVENTION IN ORIGINAL JURISDICTION CASES

Supreme Court Rule 9.2, as noted above at page 10, suggests that the Federal Rules of Civil Procedure should serve as a guide, where appropriate, to procedure in original actions. We have noted further that actual practice with respect to intervention in such cases has varied widely.¹⁵

The parties and *amici* raise several general policy arguments against permitting intervention in this case which are more related to the nature of original jurisdiction than to the specific requirements of Rule 24 which have been addressed above.

Several of the issues considered herein have been addressed with respect to analysis of Rule 24. Here we consider arguments that a special, more stringent, standard should apply to these issues in the context of intervention in cases brought under the Court's original jurisdiction. These arguments, if valid, might lead to a conclusion that application of Rule 24 to the instant case is not appropriate and that the motion for leave to intervene should be denied. Each of these arguments will be considered in turn.

First, both Alaska and *amici* argue that the underlying claim of petitioner-intervenor lacks the "seriousness" and "dignity" that are requisite for filing original actions in the Supreme Court, citing *Illinois v. City of Milwaukee*, 406 U.S. 91 (1972).

¹⁵See cases cited at p. 10, *supra*.

The cited case dealt with efforts to bring an action, not merely to intervene, however. The Court stated that

[T]he question of what is appropriate concerns of course the seriousness and dignity of the claim; yet beyond that it necessarily involves the availability of another forum where there is jurisdiction over the named parties, where the issues tendered may be litigated, and where appropriate relief may be had. We incline to a sparing use of our original jurisdiction so that our increasing duties with the appellate docket will not suffer.

406 U.S. at 93-94.

In the present case, the underlying claims are in fact being litigated in another, more appropriate forum; and intervention is sought solely to support the United States' position as to territory which movants might not be able to claim in any other forum because of ANCSA. As noted above, the United States itself undercuts the contentions of Alaska and *amici* with its acknowledgment that if it were determined that "the United States were not adequately representing . . . the interest of the Intervenor, it would be right to allow them to speak for themselves." *Record*, p. 29. We are not inclined to prejudge the legitimacy of the underlying claims by denying intervention here.

Furthermore, the concern expressed in *Illinois* regarding the "increasing duties with the appellate docket" is clearly inapposite in this case. Movants do not seek a new filing before the Court, and do not seek to litigate their underlying claims before the Special Master.

Second, Alaska, the United States, and *amici* all argue that the existence of movants' lawsuit in another forum eliminates the need for intervention. We believe this argu-

ment is not suited to the present posture of the case, in which movants only seek to present evidence to support the claims of the United States, in order to protect their interests in territories which may become subject to ANCSA to the extent Alaska prevails in this action. To the extent Alaska prevails here, movants are *barred* from prosecuting their claim elsewhere.

Third, Alaska, the United States, and *amici* all urge that especial attention be paid to *Utah v. United States*, 394 U.S. 89, in which the Court denied Morton Salt's petition for leave to intervene in a boundary dispute between the United States and Utah which was before the Court under its original jurisdiction. (See Part II, p. 7 above)

Morton had sought to intervene on the basis that its own interests in land surrounding the Great Salt Lake could be undermined if the suit were to proceed without its participation. The Court responded that its original jurisdiction is to be invoked "sparingly," and that there was "no compelling reason requiring the presence of Morton." 394 U.S. at 95.

The Court based its conclusion on the existence of a stipulation entered into by the parties which mooted any effect the suit might have had on Morton's interests. The Court rejected Morton's substantive challenge to the validity of the stipulation and concluded that ". . . we decline to permit intervention for the sole purpose of permitting a private party to introduce new issues which have not been raised by the sovereigns directly concerned." 394 U.S. at 96.

In *United States v. Alaska*, no such stipulation has been entered into; indeed, since any such stipulation would in

effect waive the mandatory provisions of a duly enacted statute, ANCSA, such a stipulation would in all likelihood be invalid. Furthermore, movants in *United States v. Alaska* have agreed to restrict themselves to issues already before the Master and to raise no new issues. Given these differences between the cases, analogy to *Utah v. United States* is far-fetched.

Fourth, Alaska argues that others may seek to intervene if movants are granted permission to do so. *Brief of the State of Alaska*, p. 5. *Amici* oil companies have indicated that they would consider moving to intervene if movants are granted their request. *Brief of amici curiae*, p. 1.

The Court in *Utah v. United States* referred to the possibility of multiple intervention, stating that permitting Morton to intervene might require the admission of "any of the other 120 private landowners who wish to quiet their title to portions of the relited lands, greatly increasing the complexity of the litigation." 394 U.S. at 95-96. The Court reached that conclusion only after deciding that the existence of the stipulation voided any compelling reason for intervention and on the assumption that intervenors would raise new issues regarding their own claims. The instant case has been distinguished with respect to these characteristics.

Given the restrictions to which movants have agreed, as presently informed the Master does not believe that the mere fact of their presence in the case would give rise to grounds for participation by others, either by those similarly situated to movants or by those adverse to them. In-

sofar as that is to become a problem, it will be sufficient to abide the event.¹⁶

In contrast to the arguments raised by those opposing intervention, this Master finds himself drawn to the words of Chief Justice Taney in *Florida v. Georgia*, 58 U.S. (17 How.) 478 (1854). Writing for the Court, he stated that with respect to original jurisdiction, it is the "duty of the Court to mould its proceedings for itself, in a manner that would best attain the ends of justice, and enable it to exercise conveniently the power conferred. And in doing this,

¹⁶The Special Master notes the concerns of *amici* and others regarding possible collateral effect on individuals or entities which may not be parties to this case, but which may be engaged in litigation over issues which are involved in the matter before the Special Master. It is observed that the doctrine of collateral estoppel applies only to those who are parties to the matter in which findings of fact are made, and that *amici* therefore could not be bound in other litigation if the Special Master were to make a finding of fact without the level of scrutiny which *amici* might feel was warranted. See Wright, Miller, and Cooper, *Federal Practice and Procedure*, Jurisdiction § 4416 (1981).

Nonetheless, the Special Master will undertake two steps to alleviate any concern which might have arisen. First, in the Final Report the Special Master will specifically recite that, pursuant to the doctrine of collateral estoppel, findings of fact are intended to bind only the parties to this litigation and not those who have not been able to participate. Second, at the request of *amici* or any of the parties, with respect to all issues in which intervenors participated pursuant to this Order, a draft Report stating the findings of fact, conclusions of law and recommendations of the Special Master may be circulated to the parties and to *amici curiae* Amoco Production Co. et al.; *amici* shall be permitted to draw the Special Master's attention to any unintended or unjustified effects that such findings, conclusions or recommendations might have in other litigation on individuals or entities not party to this litigation, and to file with the Special Master a brief with respect to those effects. All parties will have adequate time to respond to any such brief.

it was, without doubt, one of its first objects to disengage them from all unnecessary technicalities and niceties, and to conduct the proceedings in the simplest form in which the ends of justice could be obtained." 58 U.S. at 491.

In this case it is in the greatest national interest to clear title to this area once and for all, to ensure a stable and appropriate development of its resources, for reasons vital to our domestic economy and international strategic needs.

At the same time, movants raise claims to those areas which could be permanently extinguished, at least in part, depending on the outcome of this case. The "ends of justice" require that they be permitted to speak for themselves, and be heard, and present the evidence which they claim to possess and that otherwise would not be put in the record. Their participation should be strictly limited according to the terms of the Recommendations and Order that follow, and should continue so long as they can credibly allege an underlying interest in the subject matter of the controversy.¹⁷

¹⁷It is the Master's intention to minimize to the extent possible any duplication or delay that might result from movants' participation in the case—a desire presumed to be shared by Counsel. Coordination between the United States and movants in the presentation of evidence is to be expected. To invoke the example of Judge Tuttle, serving as Special Master, ". . . the order of proof and examination" by the United States and the movants should be "structured in a logical sequence which avoids duplication or accumulation," and where they are not so arranged or presented, Alaska in particular will be entitled to object. See *Arizona v. California*, No. 8 Original, *Memorandum and Report on Preliminary Issues*, August 28, 1979, p. 16.

RECOMMENDATIONS

For the reasons just stated, the Special Master recommends:

1. That the Motion to Intervene filed by the Inupiat Community of the Arctic Slope and the Ukpeagvik Inupiat Corporation be granted, to the extent and subject to the limitations hereafter stated;
2. That the intervention shall be restricted to Issues 2 through 5 identified by the original parties in their Joint Statement of Questions Presented and Contentions and Issues 12 and 13 of the Supplement thereto, and any related further issues bearing on the seaward boundary of the submerged lands of the State of Alaska which, at the request of one or both of the original parties, the Special Master shall agree to hear; in addition, intervenors may present evidence on matters already heard by the Special Master, to the extent that the Special Master receives new evidence on such matters, and such new evidence involves a new theory on which such matters may be decided, and not merely elaboration, extension or explanation of evidence already received;
3. That, with respect to those issues as to which intervention is granted, the intervenors shall be restricted to supporting, in whole or in part, the right, title and interest of the United States with respect to the lands or waters in dispute between the original parties; except in accordance with this paragraph, the intervenors shall not be permitted to advance in these proceedings any claim of right, title or interest they may have with respect to the lands or waters in dispute between the original parties; no evidence

supporting such a claim shall be received; and no such claim shall be the subject of any finding of fact, conclusion of law, or recommendation in this case.

As stated at the outset, the Special Master, with the concurrence of the parties, recommends that the Court defer review of these recommendations until the conclusion of the case and the submission of the final Report, reserving to the parties the right to file exceptions thereto at that time if so advised.

Respectfully submitted,

J. KEITH MANN
Special Master

Stanford, California
January 10, 1984

APPENDIX C
ORDER OF JANUARY 10, 1984

IN THE SUPREME COURT OF THE UNITED STATES
OCTOBER TERM, 1983

No. 84, Original

UNITED STATES OF AMERICA,
Plaintiff

vs.

STATE OF ALASKA

vs.

INUPIAT COMMUNITY OF THE ARCTIC SLOPE
AND UKPEAGVIK INUPIAT CORPORATION,
Recommended Intervenor

BEFORE THE SPECIAL MASTER

ORDER

In light of the conclusions reached by the Special Master on the Motion to Intervene filed by the Inupiat Community of the Arctic Slope and the Ukpeagvik Inupiat Corporation recited in the draft interim Report circulated to the parties and to the petitioner-intervenor and *amici* and shortly to be filed with the Court, and upon consideration of the representations of the United States and the State of Alaska that neither party desires now to seek the Court's review of the Master's ruling on intervention:

IT IS ORDERED THAT:

1. From this date, and until and unless the Court shall

determine to review the Master's interim Report on Intervention, or until and unless the determination against petitioner-intervenors in *Inupiat Community of the Arctic Slope, et al. v. United States of America, et al.*, Civil No. A81-019 (D. Alaska), appeal pending, No. 82-3678 (9th Cir.) becomes final and a motion to dismiss is granted pursuant thereto, the applicants for intervention shall be deemed parties to this case in the proceedings before the Special Master, with all the rights of parties, subject to the limitations hereafter stated;

2. Intervention shall be restricted to Issues 2 through 5 identified by the original parties in their Joint Statement of Questions Presented and Contentions and Issues 12 and 13 of the Supplement thereto, and any related further issues bearing on the seaward boundary of the submerged lands of the State of Alaska which, at the request of one or both of the original parties, the Special Master shall agree to hear; in addition, intervenors may present evidence on matters already heard by the Special Master, to the extent that the Special Master receives new evidence on such matters, and such new evidence involves a new theory on which such matters may be decided, and not merely elaboration, extension or explanation of evidence already received;

3. With respect to those issues as to which intervention is granted, the intervenors shall be restricted to supporting, in whole or in part, the right, title and interest of the United States with respect to the lands or waters in dispute between the original parties; except in accordance with this paragraph, the intervenors shall not be permitted to advance in these proceedings any claim of right, title or interest they may have with respect to the lands or waters in dispute between the original parties; no evidence supporting such a claim shall be received; and no such claim shall be the subject of any finding of fact, conclusion of law, or recommendation in this case;

4. Within thirty days of the date of this Order the intervenors shall file a Statement of Position with respect to each of Issues 2 through 5, 12 and 13;

5. In the event the Master shall permit one or both of the original parties to supplement or amend their Joint Statement of Questions Presented, the intervenors shall file, within thirty days of such a ruling, a supplemental statement of position with respect to such additional issues or amended contentions;

6. By February 1, 1984, the parties, including the intervenors, shall propose appropriate modifications to the timetable for further proceedings before the Special Master agreed upon by the original parties and approved by the Master at the status conference held August 1, 1983;

7. Pending the Court's final decision in this case and its Orders as to allocation of costs, and so long as the intervenors shall be parties in this case, they shall bear one-fifth of the costs incurred by the Special Master and the compensation allowed to him attributable to all proceedings following June 8, 1981 in which the intervenors participate, the United States and Alaska each to bear two-fifths of such costs and compensation from that date.

Stanford, California, this 10th day of January, 1984.

(Signed) J. Keith Mann
J. KEITH MANN
Special Master

APPENDIX D
ORDER OF JUNE 3, 1986

IN THE SUPREME COURT OF THE UNITED STATES
OCTOBER TERM, 1985

No. 84, Original

UNITED STATES OF AMERICA,
Plaintiff,

INUPIAT COMMUNITY OF THE ARCTIC SLOPE
AND UKPEAGVIK INUPIAT CORPORATION,
Recommended Intervenor

v.

STATE OF ALASKA

BEFORE THE SPECIAL MASTER

ORDER

On May 12, 1981, the Inupiat Community of the Arctic Slope and the Ukpeagvik Inupiat Corporation moved to intervene in this original action, claiming that they held unextinguished sovereign rights over certain territories involved in these proceedings, rights which were being prosecuted in another forum, *Inupiat Community of the Arctic Slope v. United States*, Civil No. A81-019 (D. Alaska). (As noted below, this other case was later decided adversely to Intervenor, 548 F. Supp. 182 (D. Alaska 1982), as was the appeal, 746 F.2d 570 (9th Cir. 1984), *cert. denied*, 106 S. Ct. 68 (1985).) The Supreme Court referred that Motion to its Special Master on June 8, 1981. 452 U.S. 913 (1981). Following briefs and oral argument, the Master prepared a Re-

port, submitted to the Court on January 10, 1984. That Report recommended limited intervention, subject to certain terms and conditions. The Special Master also recommended that the Court defer review of the recommendation until the conclusion of the case and the submission of the final Report. The Court has followed that course.

Also on January 10, 1984, and upon consideration of the representations of the United States and Alaska that neither party desired at that time to seek the Court's review of the Master's ruling on intervention, the Special Master issued an Order, based on the conclusions recited in the Report. This Order (not included in the printed report filed with the Court) provided, in part, that:

... until and unless the determination against petitioner-intervenor in *Inupiat Community of the Arctic Slope, et al. v. United States of America, et al.*, Civil No. A81-019 (D. Alaska), appeal pending, No. 82-3678 (9th Cir.) becomes final and a motion to dismiss is granted pursuant thereto, the applicants for intervention shall be deemed parties to this case in the proceedings before the Special Master . . . subject to the limitations hereafter stated . . .

Pending the Court's final decision in this case and its Orders as to allocation of costs, and so long as the intervenors shall be parties in this case, they shall bear one-fifth of the costs incurred by the Special Master and the compensation allowed to him attributable to all proceedings following June 8, 1981 in which the intervenors participate . . .

By letter of October 23, 1985, Intervenor informed the Special Master that their petition for certiorari from the decision of the Ninth Circuit unfavorable to them had been denied in *Inupiat Community of the Arctic Slope, et al. v. United States of America, et al.* and that they no longer appeared to satisfy the foregoing condition for continued participation.

The Special Master wrote the parties, including Intervenor and *Amici*, indicating his inclination to accept Intervenor's letter as akin to a motion to dismiss by analogy to FRCP Rule 41, and proposing, by the terms of the Order of January 10, 1984, that the Intervenor should be dismissed from further participation in these proceedings, subject to a continuing obligation for sharing of appropriate costs for a defined period. All Counsel have responded and concur with respect to the dismissal and its legal basis and have indicated their preferences with respect to the content of the Order.¹

Intervenor's dismissal, however, must be without prejudice to their obligation to bear their due share of the costs, subject to determination of the Supreme Court.²

In his Report, the Special Master noted the concerns of *Amici* regarding possible collateral effects of the Intervenor's participation on individuals or entities who are not parties to the case but may be engaged in litigation on related issues. *Amici* concur that the dismissal of the Intervenor renders

¹ Mason D. Morisset, Counsel for the Intervenor, has also advised that the Inupiat Community of the Arctic Slope "is virtually without any funding at the present time" and that the financial situation of the Ukpigvik Inupiat Corporation "has also substantially worsened." The Intervenor has not participated in later proceedings following the hearing and briefing of the so-called Dinkum Sands issue.

² Mr. Morisset also requested that the final paragraph of the Order read:

The ultimate distribution of costs among plaintiff, defendant and intervenors will be determined by the Supreme Court upon final disposition of this action.

Nearly identical language appears in Paragraph 10 of the "Application of Special Master for Interim Compensation" submitted to the Court on November 20, 1985. (Paragraph 10 was inserted with the authorization of the original parties on the footing of an undertaking to cover costs in equal shares on an interim basis while reserving the right to seek partial reimbursement or indemnification from the Intervenor.)

moot the procedural representations to *Amici* contained in the Master's Report to the Court of January 10, 1984.

In light of the foregoing:

IT IS ORDERED THAT:

1. The Inupiat Community of the Arctic Slope and Ukpigvik Inupiat Corporation are hereby dismissed from further participation in these proceedings, subject to the condition of paragraph (2); and

2. The Inupiat Community of the Arctic Slope and Ukpigvik Inupiat Corporation remain liable for their portion of the costs incurred by the Special Master and the compensation allowed to him attributable to all proceedings in which they participated, following June 8, 1981 and preceding the date of this Order, as ultimately determined by the Supreme Court, the Court retaining such limited jurisdiction as is required to carry out this provision.

Stanford, California, this 3rd day of June, 1986.

(Signed) J. Keith Mann

J. KEITH MANN
Special Master

APPENDIX E
STIPULATION ON QUESTION 14

IN THE SUPREME COURT OF THE UNITED STATES
OCTOBER TERM, 1986

No. 84, Original

UNITED STATES OF AMERICA,
Plaintiff

v.

STATE OF ALASKA

STIPULATION

The United States of America, herein represented by its Solicitor General, and the State of Alaska, herein represented by its Attorney General, hereby stipulate as follows:

1. Question 14 of the parties' Second Supplement To Joint Statement Of Questions Presented And Contentions Of The Parties before the Special Master, July 1984, puts at issue the existence of six areas off the north coast of Alaska containing possible low-tide elevations as depicted on National Ocean Survey Charts Nos. 16066 (5th ed. 12/25/82), 16065 (5th ed. 2/26/83), 16064 (5th ed. 4/23/83), and 16044 (6th ed. 9/15/84). The parties have since conducted a joint survey of portions of that coast and agree that the nine low-tide elevations do not exist. Issue 14 may, therefore, be answered in the negative without the need for further proceedings before the Special Master.

2. The joint survey referred to above has established the existence of twelve other low-tide elevations off the north coast of Alaska between Pitt Point and Cape Halkett. The following is a list of salient points on those features:

STIPULATION ON QUESTION 14

POINT NO.	LATITUDE	LONGITUDE
F	70 53' 57.227"	152 41' 11.030"
E-3	70 53' 23.144"	152 35' 15.360"
E-2	70 53' 14.197"	152 34' 11.882"
E-1	70 53' 11.953"	152 33' 57.025"
D-3A	70 52' 09.399"	152 26' 21.437"
D-2	70 52' 08.450"	152 26' 16.712"
C-3	70 51' 35.978"	152 22' 47.853"
C-2	70 51' 27.026"	152 22' 08.198"
C-1	70 51' 22.338"	152 21' 52.904"
A-2	70 49' 33.732"	152 12' 48.405"
A-1	70 49' 12.614"	152 12' 01.158"
A-3B	70 49' 01.848"	152 11' 42.777"

Thus done and signed on behalf of the United States in Washington, D.C., this 17th day of July, 1987.

UNITED STATES OF AMERICA

By: (Signed) Michael W. Reed

Thus done and signed on behalf of the State of Alaska in Juneau, Alaska, this 10th day of August, 1987.

STATE OF ALASKA

By: (Signed) G. Thomas Koester